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Ytsma, Jehannes

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Proefschrift

ter verkrijging van de graad van doctor
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ten overstaan van een
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door

Jehannes Ytsma

geboren op 24 april 1957 te Burgum

Promotor: Prof.Dr. G. Extra
Copromotor: Dr. R. van Hout

Contents

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The current study relates to the research project called *Taalpeiling yn Fryslân* (Language Assessment in Friesland), that was conducted at the same time (cf. De Jong and Riemersma 1994). The fieldwork of both investigations was carried out in close cooperation. In relation to this, I would like to express my thanks to Dr. Sikko de Jong and Dr. Alex Riemersma for the pleasant way in which our fruitful cooperation took place.

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Chapter 1: Introduction

1.0 Introduction to the chapter

This study deals with the acquisition of Frisian as first and second language among primary school children in Friesland. In this opening chapter we attempt to locate our study. It consists of three sections. We commence by briefly acquainting the reader with the Frisian language and its status in contemporary society (§1.1). This part serves as general background. It is chiefly intended for those who are unfamiliar or only slightly familiar with the Frisian case.

Second, we situate our study in the framework of empirical research that has been carried out thus far into the relation between the Frisian language and its social context (§1.2). Attention is drawn to sociological and sociolinguistic investigations. Some characteristics of the research projects conducted are given as regards theoretical, methodological and thematical aspects. We do so as far as these characteristics are of consequence to the design of our study.

Third, we indicate the general aims of this study (§1.3). Finally, we specify the place of our study vis-à-vis the research project *Taalpeiling yn Fryslân* (Language Assessment in Friesland) (§1.4).

1.1 Frisian: language and society

This study is about West-Frisian, an indigenous minority language spoken by well over 400,000 (out of 600,000) inhabitants of the bilingual province of Friesland, The Netherlands[1]. Dutch, the national standard language in The Netherlands, is the dominant language in Friesland. The two languages spoken in the province have close typological affinity as they are both Germanic languages. Whereas Dutch and German belong to the branch of continental Germanic languages, Frisian and English are regarded as North-Sea Germanic languages. Because of the historical relationship between Frisian and Dutch, the linguistic distance between the languages is comparatively small. Despite the relatively close link between the languages, linguistic differences between Frisian and Dutch are manifold. Only a few examples of these are given here; for a further linguistic characterisation we refer to Hoekstra and Tiersma (1994) and a relatively recent Frisian grammar (Tiersma 1985).

First, Frisian phonology differs in many respects from the Dutch phonological system. The Frisian vowel system is more elaborate than the Dutch one (Feitsma 1971:11) and the language has various distinguishing diphthongs. Frisian phonology is also marked by the breaking phenomenon (see §3.2.1). Frisian's morphology differs markedly from the Dutch system. Diminutive formation is a fine example hereof. Whereas Frisian has two underlying diminutive suffixes, Dutch has only one (De Haan 1990:109). Frisian has its characteristic */ke/* diminutive suffix, which standard Dutch lacks. Another case of morphological

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[1] Note that West-Frisian should not be confused with East- and North-Frisian, which are both located in Germany.

dissimilarity is the distinction between Frisian Class 1 verbs, which end in */e/*, and Class 2 verbs, terminating in */je/* (see §3.2.1). This distinction differs from the Dutch verb system, where infinitives characteristically end in */e(n)/*. As for vocabulary, Frisian and Dutch share a common stock of words, but the largest portion of Frisian and Dutch vocabulary is dissimilar. At the lexical level, we must assume an extensive borrowing from Dutch into Frisian, particularly in cases of modern words for new concepts, but also for common words (see §4.5). Frisian syntax runs parallel to a sizable extent to the Dutch system. Nevertheless, there are several differences between the two syntactical systems (cf. Popkema 1987). Particularly verb order differs in various ways (cf. De Haan 1987, 1990; see §3.2.1).

Dialectical variation in Frisian is quite small. Yet, there are the regional variants *Klaai* (clay), *Wâld* (wood) and *Súdwesthoek* (South-West corner) Frisian. These variants are mutually intelligible, for dialectical diversity is confined for the most part to phonological differences. An example of this is the breaking phenomenon that does not occur in South-West corner Frisian.

As already said, Frisian is a minority language. It should be borne in mind, however, that relatively many inhabitants of the province can speak the language. Research has shown that Frisian is the *first language* of 54% of the population and 73% claim to be able to speak the language (Gorter et al. 1988:31,10). Relating these two percentages to each other, it follows that at least 19% of those who can speak Frisian have learnt it as a *second language*. All Frisian-speaking inhabitants of the province use (at least) two languages. Next to Frisian they also speak Dutch, the national standard language of The Netherlands, albeit sometimes with differing fluency. Few if any older Frisian people may be monoglot, but nearly all Frisian youngsters are fluent bilinguals. The current generation of Frisian primary school children has learnt to speak Dutch as a second language at an early age, mostly before they enter elementary school. Things were different in the past. Research carried out in the early Fifties evidenced that Frisian children from grade one of elementary school knew few words in Dutch (Post 1951). This contrasts widely with later findings obtained in the Seventies and Nineties (Wijnstra 1976, De Jong and Riemersma 1994). Wijnstra (1976:279) found only minor deviations from standard Dutch in his Dutch speech samples of Frisian primary school children, but these did not hinder functional speaking ability in Dutch. Recently, De Jong and Riemersma (1994) demonstrated that Frisian primary school children's communicative speaking ability in Dutch differed hardly from Dutch children's speaking ability.

The role of Frisian in primary schooling dates back to 1907, when the provincial government offered a grant for Frisian lessons. In 1955 the teaching of Frisian was permitted throughout primary school and the use of Frisian as medium of instruction was allowed in the lower grades. In 1980 Frisian became an approved medium of instruction in all grades and an obligatory school subject throughout primary education. However, research has shown that in the late Eighties a majority of primary schools spent one lesson on education in Frisian per week, so time expenditure was limited (*Inspectie van het Onderwijs* 1989:34). The position of the language as vehicle of instruction is also weak. A good fifth of the primary schools makes no use of Frisian as a medium, while more than half of the schools use Frisian for 10 to 30% of the teaching time (*Inspectie van het Onderwijs* 1989:36). On the whole, primary schools aim at reading Frisian, but writing in the language is a much less prevalently pursued objective.

In connection with compulsory Frisian at primary level, Frisian spelling has been simplified in 1980. Despite its standardisation as written language, Frisian predominantly functions as spoken language. Research has shown that of the provincial population 94% can understand the language and 73% can speak it (Gorter et al. 1988:10). Figures on literacy in Frisian are considerably lower. It appears that 65% of the inhabitants can read Frisian and only 10% can write in the language. These figures illustrate that many people in the province are illiterate in Frisian. Therefore, literacy does not exert a prominent conserving force on the language.

The traditional diglossic language relationships in the province (cf. Pietersen 1978) have changed to a certain extent through a prudent process of Frisianisation of more formal domains such as education and public administration (Gorter et al. 1984:256). However, these recent developments must be placed in a historical perspective in which Frisian has functioned as a dialect for centuries. For language historical reasons and because (written) Frisian has at present a (modest) place in some formal domains, it cannot be considered a dialect. On the other hand, the language does not fully meet the criteria of a standard language such as complete standardisation, terminological modernisation and full-fledged educational spread (Haugen 1987). One could say that Frisian nowadays is in an interposition between dialect and standard language (cf. Feitsma 1978, 1981:336, Breuker 1993:281).

Contrary to the just mentioned process of Frisianisation, Friesland province has clearly witnessed a strong demolinguistic Dutchification during the last few decades. In the early Eighties, Frisian was the home language for 59% of the provincial inhabitants, whereas in the Fifties and Sixties, it was still the language usually spoken at home by 71% of the citizens (Gorter et al. 1984:15). Migration has been the major cause of demolinguistic Dutchification (cf. Van Langevelde 1993). It has been estimated that there was a positive migration figure of approximately 40,000 non-Frisian speaking people during the period between 1970 and 1980 (Gorter 1983). In the same period, there was a surplus of outmigration of some 20,000 Frisian-speaking people.

Many non-Frisian immigrants settled down in the Frisian countryside. At the same time, many Frisians migrated to the larger towns in the province, which had a non-Frisian character of long standing. The result of both simultaneous processes of migration was that the linguistic geography of the province underwent a rapid and sizable change. The countryside Dutchified considerably and the fully Frisian environment disappeared (cf. Zondag 1984). By contrast, the towns Frisianised a little. In short, the province as a whole has become linguistically heterogeneous during the last few decades.

Such a fast and extensive demolinguistic Dutchification will most likely coincide with a Dutchification of the Frisian language itself (cf. Breuker 1979, De Haan 1990, Feitsma 1971, Sjölin 1976). Tiersma (1986) gives several examples of Dutch influences in various phonological, morphological, lexical and syntactical domains. A question related to linguistic Dutchification is whether (and to what extent) Frisian changes under the external influence of Dutch, or whether (and in what degree) the language undergoes internal changes. The problem of language change occurring to Frisian has been dealt with in several sociolinguistic studies. The next section is concerned with these (§1.2.2).

1.2 Sociology of language and sociolinguistics in Friesland

The past section briefly introduced the Frisian language and its status in society. Now we report on the main empirical studies published on the Frisian language in its social context. We do this so as to place our research in the context of prior Frisian studies, and because the former investigations have been contributory to the design of the present study. We confine ourselves to the studies carried out from the perspectives of sociology of language and sociolinguistics. Other investigations, for instance those from a more didactical or educational angle (e.g. Boersma 1958, Post 1951, Wijnstra 1976), are left aside.

It should be noted beforehand that the two disciplines of sociolinguistics and sociology of language do not differ categorically. Nevertheless, it seems to us that the gradual distinction between the disciplines has sometimes been belittled rather than accentuated in Friesland (cf. Pietersen 1982a:284, Gorter 1993:2). Social variables are core variables in sociology of language, while linguistic variables rest at the heart of sociolinguistics.

The disciplines of sociolinguistics and sociology of language were established in the early Sixties. They gained prominence in the United States. Sociolinguistics has become a common scientific discipline in The Netherlands (cf. Van Hout et al. 1992), but the same cannot be said of sociology of language. Conversely, research interest in Friesland has been more in sociology of language than in sociolinguistics. The following sketch of Frisian studies attests to this.

1.2.1 Sociology of language

The precursor of Frisian sociology of language has been a large-scale inventory of the language of all primary school children in the province. It was carried out in the Fifties by Boelens and Van der Veen (1956), even before sociology of language was established as a scientific discipline. The primary aim of the inventory was to gain insight into language relationships, but it was also intended to be of use for language political purposes. The inventory demonstrated that the position of Frisian was strong at the time. More than half of the municipalities in the province (i.e. 26 out of 44, or 59%) consisted of no less than 90 to 100% Frisian-speaking primary school children (Boelens and Van der Veen 1956:99).

Frisian sociology of language had its true beginning in the late Sixties. The first Frisian study explicitly conducted within the scope of sociology of language was *De Friezen en hun taal* (The Frisians and their language), undertaken by Pietersen (1969). His survey dealt with the reading and speaking habits of the provincial population, and with their attitudes to Frisian. Self-reported ability to understand, speak, read and write in Frisian was also asked for. The incentive for the study was practical above all things: institutes in the province wanted factual and reliable information about the reading of Frisian books. Pietersen's work had an impressive language political impact. The outcomes of the survey proved that Frisian was in full use and that a major portion of the population had an interest in Frisian 'language ideology'. Afterwards - and unintentionally - these findings became important arguments for officially recognising Friesland as a bilingual province (cf. *Commissie Friese-Taalpolitiek* 1970).

In connection with the implementation of Frisian as an obligatory subject in primary education - again a practical inducement - a second study was carried out

by Pietersen (1974). The survey targeted teacher training college students. It mainly examined students' attitudes to Frisian (called 'ideology') and their self-reported command of the language. It was shown that 97% of the students could understand Frisian, 80% could read the language and 55% were able to write in Frisian. Moreover, it appeared that a 'language ideology' could be demonstrated among the future teachers.

Another study that must be mentioned was Smith's research in the bilingual village of *Terherne* (Smith 1980). His point of departure was Fishman's well-known research question 'Who speaks what language to whom and when?' (Fishman 1965). Next to language use in the local community, Smith wanted to link the use of Frisian to demographic and social variables, and to the language attitudes of the village dwellers. As regards local language use, Smith's study documented a major shift from Frisian to Dutch (Smith 1980:276-77).

In 1984, the successor of *De Friezen en hun taal* was published (Gorter et al. 1984, 1988). It was a partial replication of Pietersen's earliest study (Gorter 1987a), and became known as the *Taal yn Fryslân* (Language in Friesland, henceforth *TyF*) project. A second time, a sample of the provincial population was taken to chart the actual language relationships in Friesland. This was done with an eye to the language policy of the province and because of bilingual education. Fishman's research question was elaborated and reformulated as 'What language do the inhabitants of Friesland speak to whom, where, about what and why?' (Gorter et al. 1984:3). By comparing *TyF* data to those obtained in *De Friezen en hun taal* processes of language shift could be empirically demonstrated. As to proficiency in Frisian it was shown that, in comparison with *De Friezen en hun taal*, Frisian speaking ability had decreased seven percentage points (from 83 to 76%[2]), while proficiency in the other basic language skills had remained remarkably stable. Language shift was also probed by analysing intergenerational transmission of Frisian in primary socialisation (Gorter et al. 1984:47-72). Unsurprisingly, shifts in the transmission of Frisian occurred most often in linguistically heterogeneous marriages.

In 1990, the final results were published of a small survey on the language relationships in an eastern trilingual border area in the neighbouring province of *Groningen* (Jansma and Jelsma 1987 1989, Gorter, Jansma and Jelsma 1990). This study was an offshoot of the *TyF* project. In essence, the *TyF* research question was again applied, but now to an area outside of the province where three varieties are in use: Frisian, Dutch and a non-Frisian dialect. Alongside this sociological research question, the project was characterised by a geographical approach as the researchers also wanted to know how and where a Frisian language border could be set up. The data obtained revealed that Frisian was the language of nearly a quarter of the households in this area outside of Friesland (Gorter, Jansma and Jelsma 1990:130). It was hypothesised that a further shift to Dutch and to the non-Frisian dialect would occur.

Another recent research project is Gorter's study into the daily use of Frisian in the bureaucratic setting of the municipality *It Hearrenfean* (Gorter 1987b, 1993). His study traces the use of Frisian between civil servants among each

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[2] Note that the figure of 76% stems from an adapted sample which consists of inhabitants of the province minus *The Stellingwerven* and the isles.

other, and between civil servants and 'the public', i.e. the municipal inhabitants. In the study, an ethnographic (micro) approach was combined with the more traditional (macro) approach. In this respect, a portion of this sociological research was interactionally and sociolinguistically oriented. The study showed that the use of Dutch was 'self-evident' in the setting studied, while Frisian appeared to be the marked variety.

A comparable multimethod approach applies to Jonkman's study into the social position and functioning of the vernacular of the provincial capital of *Ljouwert* in comparison to Frisian and Dutch (Jonkman 1993). Parts of his study were socio-psychologically oriented (Jonkman 1990) or typified by a historical interest (Jonkman 1992). It was shown that 24% of the inhabitants had Frisian as first language, while 'city-Frisian' was the first language of 21% of the inhabitants (Jonkman 1993:103). The corresponding figure was 37% in 1967, so a negative shift (16%) has taken place during the last two decades.

The above brief overview of sociological research on Frisian illustrates that several studies, especially the early ones, were originally set up to meet the practical need for certain data. It should be noted that this may be the case for the field of sociology of language in general. In connection with this, Kjolseth (1978:803) called the sociology of language a 'policy science'. This pragmatic alignment is quite understandable, but as a corollary it may have hampered the theoretical deepening of the field. In this connection, Pietersen (1982b) commented that the theoretical anchoring of Frisian sociology of language leaves much to be desired.

As to the methodology applied, surveys were often used as research instrument. Chiefly based on a macro-approach, highly valuable descriptions of the position of Frisian in various local areas could be obtained, in which (reported) language proficiency, language use and language attitudes were the central topics covered. In general, much sociological work on Frisian has been directed towards *language shift*.

1.2.2 Sociolinguistics

There have been fewer sociolinguistically oriented studies in Friesland. Part of the reason for the modest place of Frisian sociolinguistics might be that this sort of studies has, at first glance at least, a less direct significance for language planning and language policy. Second, the relative lack of Frisian sociolinguistic studies may relate to the fact that everyday spoken Frisian has been rather neglected by the arm-chair analyses of many Frisian linguists, who were principally interested in the history of the language or in its linguistic structure.

There have been several sociolinguistic studies that we want to mention here. An important piece of research was undertaken by Sjölin (1976). He related (mainly lexical) interferences from Dutch into Frisian to the unstable form of societal bilingualism that is characteristic for the province. The analysis was based on a sample of fourteen hours of tape-recorded spoken Frisian, which altogether contained as many as 4,500 occurrences of interference. The inquiry also aimed at occurrences of code-switching. Sjölin intended with his study to make an empirically grounded contribution to the standardisation of Frisian (Sjölin 1976:13). He argued that Frisian was no longer capable of functioning as

a fully-fledged medium of communication, as the language had not been able to adapt to the new domains that had arisen during the previous thirty years (Sjölin 1976:56-57). Sjölin argued that in such circumstances the speaker has to draw on Dutch, the only source available.

A similar interest in language norm and, relatedly, in language change, can be observed in the work of Breuker (1982). He looked, for instance, into the replacement of the traditional Frisian */ke/* diminutive suffix by the 'Dutchified' */tsje/* suffix. The informants consisted of a small, highly non-representative group of students. Breuker concluded that this morphological change in Frisian must be explained by external Dutch influence.

The most recent study of Breuker also centred around the Frisian language norm (Breuker 1993). He questions whether Frisian can be regarded a standard language. Mainly using Haugen's model of standardisation, Breuker considered aspects of form and function as well. He concluded that Frisian is nowadays in an interposition between dialect and standard language (Breuker 1993:281).

Worthy of note is Boelens' research on phonological changes of Frisian (Boelens 1987b). He explored the application of the phonological rule of breaking (see §3.2.1) among Frisian-speaking primary school children in the strongly Frisian municipality of the *Dongeradielen*. Boelens wanted to examine whether breaking is still acquired by Frisian children or whether it is a disappearing phenomenon due to language change. The results obtained led to the conclusion that breaking is generally fully realised between the ages of six and twelve. Yet, the outcomes also exposed an incipient language change. Further on we shall explicitly relate our findings about breaking to those obtained in the *Dongeradielen* (see §4.2). A final major sociolinguistic research project dealt with pronunciation phenomena (syllabification, nasalisation and assimilation) in Frisian and Dutch spoken by native speakers of Frisian (cf. Feitsma et al. 1987, Feitsma 1989, Van der Kuip 1986, Meekma 1989). As part of the project Meekma (1989) tried to account for her findings through Milroy's network theory. The informants - who were divided into three generations and three 'societal groups' - lived in the heart of the Frisian countryside, a 'pro-Frisian' surrounding indeed. It was hypothesised that the pronunciation of Frisian changes under the influence of Dutch, but that was not clearly corroborated by the results obtained. It was shown that the Frisian pronunciation of Frisian was well preserved by the informants, especially by the youngest generation. However, the societal group of 'nonfarmers with higher education' had a less Frisian pronunciation of Frisian compared with the 'nonfarmers with lower education' and the 'farmers', and that could point at a Dutch direction for the future (Feitsma et al. 1987:91-92).

This concise outline of Frisian sociolinguistic work makes clear that, above all things, *language change* occupied centre stage. Many Frisian studies had no firm theoretical anchoring. Generally speaking, this holds true for many studies on language change. Occasionally Frisian findings were put in a theoretical framework. Meekma (1989), for example, employed network theory and Breuker (1993) referred to Haugen's model of standardisation.

The linguistic data were often gathered among non-representative, 'pro-Frisian' informants. For instance, Breuker's study on diminutive formation included Frisian-speaking students of Frisian (Breuker 1982) and Boelens' (1987b) school children lived in a typically Frisian area (see §4.2). On purpose, Feitsma had Frisian informants who were 'maximally autochthonous' (Feitsma 1989:192). In

our contention it is hard to get a complete picture of (recent) language change from such pro-Frisian informants alone.

When looking at the language sectors under research it shows up that, broadly speaking, data have been collected about Frisian's phonology, lexicon and morphology. As in dialectological work conducted in The Netherlands (see De Schutter, Gerritsen and Van Bree 1990) syntax has been disregarded in Frisian studies. In part, the lack of research on syntax might be explained by methodological difficulties that arise when measuring syntactical phenomena (see §3.4.1). Most likely, the shortage of syntactical studies is also explicable by the idea that the Frisian syntactical system differs only little from Dutch syntax and is therefore less interesting (cf. Tiersma 1985:103).

The overview also evidenced that not too much research has been done into the acquisition of Frisian as first language[3]. In fact, Boelens (1987b) was the only scholar empirically exploring first language acquisition. Boelens was interested in child language acquisition as he saw child language as an indicator of language change. The part of our study that investigates the acquisition of Frisian as first language follows the same line of reasoning.

Finally, it appears that no empirical research has been done in the acquisition of Frisian as a second language, despite the fact that at present so many non-Frisians live in the province (see §1.1). This is understandable if one bears in mind the above-mentioned focus on language change[4]. On the other hand, as mentioned earlier, of those who claim to be able to speak Frisian, nearly a fifth has learnt to speak it as a second language, and this might arouse interest in the rate and structure of the acquisition of Frisian as second language and in the factors determining speed and success of second language acquisition.

The above empirical investigations were divided according to their perspective on the connection between language and its social context into sociological and sociolinguistic inquiries. Still another angle from which the relation between language and its social context can be approached, is the social psychology of language. One finds that a deliberate socio-psychological approach to the study of bilingualism in Friesland has scarcely been applied until now (see however Jonkman 1989 1990, Van der Plank 1982, 1987, Ytsma 1989 1990a). That is rather remarkable, as the socio-psychological vantage point had already been strongly advocated in the early Eighties by Pietersen, the first Frisian sociologist of language (Pietersen 1982b). It is also notable if one brings to mind that language attitude has been a major topic in studies on Frisian bilingualism (cf. Gorter and Ytsma 1988), and language attitude can be conceived as the research object *par excellence* of the social psychology of language.

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[3] The same applies to the research orientation of many other European indigenous language minorities.

[4] Note that the lack of studies into the acquisition of Frisian as second language suits in the general absence of such work in other minority regions (see §2.6).

1.3 Goals of the study

It has been mentioned in the first section of this chapter that a considerable demolinguistic Dutchification has happened in Friesland province during the last decades. It was indicated too that the shifted language relationships arguably go together with processes of language change. Relatedly, it was demonstrated that sociological studies on Frisian often focussed upon *language shift* (§1.2.1), whereas sociolinguistic inquiries frequently targeted concomitant processes of *language change* (§1.2.2). As a consequence of the orientation towards language shift and language change, the *acquisition* of Frisian as first or second language - the theme of our study - has received scant attention in the research conducted so far.

We wind up the introductory chapter by giving a brief account of the most important general intentions of the current research project[5]. First and foremost, our study investigates the extent to which Frisian children successfully acquire Frisian as *first language*. To examine the actual state of affairs, we want to obtain data on young Frisian speakers' knowledge of their mother tongue in terms of typical features that cover the whole spectrum of grammar (i.e. phonology, morphology, lexicon and also syntax). The language material collected may attest to the orderly heterogeneity of present-day Frisian. Studying a group of Frisian children is most interesting, for young speakers will most likely show the clearest signs of possible changes occurring to the language. This contrasts with the forementioned pro-Frisian informants who took part in a number of earlier sociolinguistic studies. A comparison between Frisian children's knowledge of Frisian and the command of Frisian among the next generation of Frisian parents is useful, since an intergenerational comparison potentially discloses less successful language learning among the youngest generation. Less successful acquisition of Frisian as first language can be a source of language change. In sum, we investigate *first language acquisition* in a context of *language contact* and *language change*.

The second goal of the present study is to examine the rate and success of the acquisition of Frisian as *second language* among Dutch children. As indicated above, many Dutch-speaking people nowadays live in Friesland and it has been evidenced that a portion of them report having learnt Frisian as second language (see §1.1). Yet, it is unclear to what extent they pick up the language and what the influential factors are. Except for the data obtained in the research project *Taalpeiling yn Fryslân* (see §1.4) all the data we have on the acquisition of Frisian as second language are based on self-reporting. It seems appropriate to investigate the acquisition of Frisian as second language among young learners, as it can be argued that youngsters learn a second language more easily and more proficiently than do adults (Van Els et al. 1984:104). Besides, the achievements of the Dutch children who participated in the study can be set alongside those of their Frisian schoolmates.

Third, our study seeks to gain insight into Dutch primary school children's socio-psychological disposition towards Frisian. The socio-psychological variables under research - attitudes, motivation and self-confidence - are not only treated

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[5] The research questions formulated in more detail are presented in Chapter 3 (§3.1).

as dependent variables, as we also want to trace the relevance of these variables to the acquisition or non-acquisition of Frisian as second language. Socio-psychological aspects may be thought to be specially influential as for the (non)acquisition of a lesser used second language by members of a dominant group. Moreover, the inclusion of a socio-psychological angle in our study can be a further step towards the application of socio-psychological notions in research on bilingualism in Friesland.

Finally, it is hoped that the results obtained can be of use to Frisian schooling (see Chapter 6). An empirically grounded understanding of primary school children's command of Frisian as first or second language and of Dutch children's socio-psychological disposition towards the language can serve as baseline for educational initiatives. More specifically, a better insight into Frisian children's command of their mother tongue may have didactic consequences (cf. Veeman-Wellinga 1983).

1.4 Language Assessment in Friesland

Our study on Frisian as first and second language relates to the project called *Taalpeiling yn Fryslân* (Language Assessment in Friesland), that was carried out in the same period (De Jong and Riemersma 1994). We investigate the acquisition of specific elements of Frisian phonology, morphology, lexicon and syntax, while *Taalpeiling yn Fryslân* aimed to gauge proficiency in Frisian and Dutch in terms of the basic skills of understanding, speaking, reading and writing among children at the end of primary school. Both studies examine language proficiency among Frisian and Dutch children. From the topics studied it can be seen that the two studies complement one another as far as proficiency in Frisian is concerned. Whereas we focus upon children's knowledge of formally defined linguistic elements, De Jong and Riemersma (1994) deal with their communicative skills in the language.

As distinct from the sociolinguistic and socio-psychological slant of the study reported here, *Taalpeiling yn Fryslân* has an educational approach. It was carried out largely analogous to the language part of the national project called *Periodieke Peiling van het OnderwijsNiveau* (cf. Zwarts 1990).

The link between *Taalpeiling yn Fryslân* and our research project is chiefly in the group of informants, as the school children participating in both studies overlap in part. So the fieldwork could be done collectively. Furthermore, we will make use of some data on Frisian speaking ability that were originally gathered within the framework of *Taalpeiling yn Fryslân.*

As far as proficiency in Frisian is concerned, it was found in *Taalpeiling yn Fryslân* that understanding Frisian was satisfactory for both the Frisian-speaking and Dutch-speaking pupils involved in the project. However, the results about speaking ability in Frisian were less favourable. In particular, it was shown that Dutch children experience great difficulty when speaking Frisian (De Jong and Riemersma 1994:116).

As a side-step in the project, the quality of spoken Frisian was also evaluated. Frisian children obtained an average score of 7.13 on a 10-point scale used to estimate the quality of Frisian. By contrast, Dutch children's mean only amounted to 3.68 (De Jong and Riemersma 1994:119). Furthermore, it appeared that five

percent of the Frisian children obtained ratings lower than six, whereas a quarter of them gained a relatively low score of six. Only thirteen percent of the Dutch children obtained scores higher than five. Such findings suggest that the quality of Frisian is a theme deserving further examination. The conduct of our research, and especially the part about the acquisition of Frisian as first language, is to be viewed in that light.

Chapter 2: Theoretical background to the study

2.0 Introduction

Chapter 2 provides a theoretical backcloth to our research. In the course of the chapter we expound several concepts and theoretical notions pertaining to our study. These relate to the issues of (first and second) language acquisition and language change.

To treat these issues we have divided the chapter into six main sections. To start with, we focus on the themes of first and second language acquisition. We commence by treating a number of terminological aspects (§2.1). After that, we set out some of the prevailing theories of (or theoretical approaches to) first and second language acquisition (§2.2).

In the portion of our study that is concerned with Frisian as a first language we examine the acquisition of Frisian in a context of language contact and language change. Therefore, section 2.3 is about the link between first language acquisition, language contact and language change. The next two sections are concerned with different aspects of language change. Section 2.4 treats the distinction between intra- and interlinguistic change. Section 2.5 then deals with the gradualness of language change.

Lastly, our attention is directed to the acquisition of Frisian as a second language. The final section considers the typical case of the acquisition of a minority language as second language (§2.6).

2.1 First and second language acquisition: terminology

The research theme of the current study - the acquisition of Frisian as a first and second language - invokes the terms *acquisition, first language* and *second language*. These terms deserve some clarification, as the conceptual differences between acquisition and learning, and between first and second language are thorny matters that relate to our work.

This study is oriented towards the acquisition of a number of formally defined linguistic variables in the realms of phonology, morphology, lexicon and syntax (see §3.2.1). It should be understood that the linguistic variables studied are acquired in a natural process of language acquisition rather than learned in a formal, educational context. This distinction hints at the dichotomy between subconscious or implicit *language acquisition* and conscious or explicit *language learning*, which Krashen (1987) adumbrates with respect to adult second language acquisition. McLaughlin (1987:20-24) has criticised such a major division between learning and acquisition. He rightly argued that the two concepts do not form a strict dichotomy. Further he stated that the concepts of learning and acquisition are poorly defined by Krashen. Notwithstanding such fundamental critiques and the fact that the terms acquisition and learning are frequently used interchangeably by many authors, we maintain that the distinction between the two concepts can be a practical analytic tool for us. The term acquisition is used

here to clarify the type of circumstances in which first and second language acquisition takes place[6].

As far as these circumstances are concerned we emphasise that the linguistic variables under research are seldom taught at school. Instead, Frisian-speaking children and Dutch-speaking children pick up these variables in informal contexts. They do so in an untutored process of acquisition, that is free from systematic guidance. It goes without saying that the contexts for both groups of children are not identical. For Frisian children the prime setting is the family, although the influence of the peer group should not be neglected. Mainly during interaction within the home and the peer group, they acquire Frisian as mother tongue. This happens by actively using the language. By contrast, everyday communication with Frisian members of the peer group (in school and outside) makes up the context in which Dutch children may pick up (some) Frisian. Acquiring Frisian as a second language commonly takes place by exposure to the language. It happens by hearing the language used by native speakers.

As said, the terms language acquisition and language learning refer to an intricate distinction. As for the terms *first language* and *second language* things are no less complicated, for we are confronted with all sorts of related labels such as home language, mother tongue, own language, native language, school language, foreign language, interlanguage, target language, sub-/superordinate language and dominant language. This nomenclature generally corresponds to the type of definition of first and second languages. In this respect, Skutnabb-Kangas (1981:20-34) came up with four types of first language definitions: one's mother tongue can be defined by origin, competence, function or attitude. On account of the acquisition of two languages, we add a fifth, chronological type of definition to the four named by Skutnabb-Kangas. The five types of definition can be connected to most of the fore-mentioned labels:

origin	: mother tongue
competence	: subordinate - dominant language
function	: home - school language
attitude	: own - foreign language
chronology	: first - second language

In our study of Frisian we decided to use the terms first and second language, thus applying the chronological definition. We do so as this definition entails a dichotomous pair of terms, in contrast to the term mother tongue which lacks a terminological counterpart, and also as distinct from the paired terms own and foreign language, which contrast conceptually dissimilar words. More important, we use the chronological definition as those derived from competence and function seem less appropriate. The facility of a bilingual child in each of his two languages often changes over time and may differ according to his level of oral or written language proficiency. Hence, a definition by competence is less

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[6] Although our study deals with language acquisition, we use the term (language) *learner*. The reason for this simply is that the term (language) *acquirer* is not really a recognised English word.

feasible. Similarly, the application of a definition by function seems rather troublesome. Children who are used to speak Frisian at home may also speak that language at school to some degree, for Frisian currently has a (modest) place in education. As the language relationships in Friesland are not strictly diglossic, the home language of Frisian children also functions within the setting of the school. Moreover, most Frisian children are regularly exposed to Dutch within their family, for example by Dutch radio and television programmes, and by Dutch-speaking friends and acquaintances. Therefore, the language of the home will rarely be exclusively Frisian. On the other hand, a child who speaks Dutch at home will normally also speak the home language at school. His home language and school language coincide. This betrays a crucial disadvantage of the definition by function: it suits the minority child only.

As regards the chronology of first and second language acquisition we can grossly discern *successive* and *simultaneous* bilingualism. McLaughlin (1987:8) states that children who are exposed from birth to bilingual language presentation acquire both languages simultaneously. In Friesland, this may happen when a child has a (monolingual) Dutch-speaking father while his mother speaks Frisian at home, or the other way round. A different kind of bilingualism occurs when one language is acquired first and a second one subsequently. Second language acquisition can then be called successive. To differentiate between simultaneous and successive bilinguals McLaughlin (1978:9) - admittedly arbitrarily - sets the cutoff point at three years.

Broadly speaking, the Frisian and Dutch children taking part in our study both might be called successive bilinguals. The *primary linguistic data* for the Frisian children selected in our study has consisted of Frisian in principle, since all members of the family (father, mother and siblings) habitually speak almost exclusively Frisian at home (see §3.3). Young Frisian children are practically monoglot for a while, but after the age of three or so they begin to acquire (some) Dutch (cf. Boelens 1974, Ytsma 1990b). In this respect they can be conceived as successive bilinguals. Dutch children stay monolingual, or they acquire (some) Frisian as second language outside of their own family. They probably do so at a later moment than Frisian children acquire Dutch. Dutch children are successive bilinguals to the degree in which they succeed in adopting Frisian as second language.

2.2 First and second language acquisition: theoretical aspects

In this section we shall briefly discuss some theoretical viewpoints on first language acquisition (§2.2.1) and we delineate the most important (socio-psychological) theories on second language acquisition (§2.2.2). We thereby introduce a number of basic concepts and themes that recur in later chapters.

2.2.1 First language acquisition

No all-embracing theory of first language acquisition has been established. However, one can demarcate different perspectives regarding thinking on first language acquisition. Brown (1987:17-24) mentions the behaviouristic, the nativistic and the functional perspective. Actually, these are different star-

ting-points for studying early child language acquisition. The behaviouristic and nativist approaches are viewed as two opposite ends of a continuum between external and internal factors operating in first language acquisition, while the functional position lies in between.

According to the *behaviouristic* point of departure, the acquisition of a first language can be described and explained by a Stimulus-Response (*SR*) model (Skinner 1957). Every verbal utterance of a child follows on an external verbal or non-verbal stimulus. A young child's utterance is often reinforced by his parents. Next to reinforcement, imitation is seen as an influential factor. Utterances of the parents are imitated by the child, and the frequency of utterances in a child's immediate environment is thought to be of great importance.

Contrary to the *SR*-model, the *nativist* position asserts that first language acquisition is innately determined. Nativists question the theoretical adequacy of the behaviouristic approach with its strong reliance on external factors. Internal factors are considered more important by nativists. By means of the so-called Language Acquisition Device young children build an internal grammar by listening to the language that they are exposed to in their immediate environment (primary linguistic data). The role of the environment is finite, however. The environment triggers the unfolding of a genetically predetermined programme of language acquisition called Universal Grammar (cf. Frijn and De Haan 1990:54). In contrast to behaviourists who argue that the input of the environment is of crucial importance, nativists stress the child itself as prime factor in first language acquisition. Children form hypotheses about the target language and these are tested in practice. When testing hypotheses, children are restricted by the constraints of Universal Grammar.

The essential point of departure of the *functional* approach to first language acquisition consists of the supposed interaction between internal and external factors. The functional viewpoint centres on cognitive prerequisites of language acquisition. With that, the approach remains nativistic in essence. Probably the best-known functionalist is Slobin (1973), who formulated a number of psycholinguistic Operating Principles. Through these principles, young children cognitively organise language input and discover structure in a language.

In the above we delineated three basic positions with respect to thinking on early child language acquisition. This illustrates that there is no unified theory of first language acquisition. Above all, the variety of approaches makes clear that first language acquisition is in all likelihood determined by internal and external factors as well. The key question regarding internal forces is which mechanisms operate in the way young children discover structure in their language. In our case that psycholinguistic question boils down to how Frisian children espouse structural aspects of their first language. Constructing structure in a language is by definition a very complex matter. However, among the Frisian children taking part in our study additional complications are to be envisioned as a corollary of internal variation in their first language. This may entail inconsistent input for them as different speakers of Frisian - for instance Frisian peers - can present different linguistic models[7]. Moreover, the current generation of Frisian children

[7] Besides, one and the same speaker may very well produce contrasting input for the language learning child.

acquires the first language in a situation of intensive language contact, and this entails as it were double input for them.

It should be understood that our study does not directly address psycholinguistic questions about how young Frisian children acquire the Frisian language system as part of the process of primary socialisation in monolingual families. Instead, we focus on the extent to which older Frisian school children have succeeded in acquiring the linguistic variables selected in a broad language contact situation that is to a greater or lesser extent submersive. In sum, our focus is not so much on the psycholinguistic *process* of the early acquisition of a first language than on *outcomes* of first language acquisition in a language contact situation.

2.2.2 Second language acquisition

Compared with the research field of first language acquisition, second language acquisition studies have an even younger tradition. As with first language acquisition, there is no all-embracing theory of second language acquisition. According to Larsen-Freeman and Long (1991:227, 288) there are at least forty 'theories' to be found in the literature. Extra (1993:364) notes that the development of a generally accepted theory has been complicated by the fact that the acquisition of a second language can take place "at any age, in widely different social contexts, for a variety of purposes, and to varying degrees of success". In the same vein, Spolsky (1989:3) argues that a theory of second language acquisition must account for the intricate question "Who learns how much of what language under what conditions". In short, the versatility of second language acquisition complicates the development of a generally approved theory.

Along similar lines, Ellis (1985:251) remarks that the broad field of second language acquisition requires different research perspectives. With regard to this, McLaughlin (1987) has given the following set of theories on second language acquisition that illustrates the wide variety of perspectives in second language acquisition research: (1) Krashen's Monitor Model[8], (2) Interlanguage Theory, (3) Cognitive Theory, (4) Linguistic Universals and (5) Acculturation Theory.

Broadly speaking, these theories relate to two different scientific perspectives. Most of them - Monitor Model, Interlanguage Theory, Linguistic Universals and Cognitive Theory - have a *psycholinguistic* scope. By contrast, Acculturation Theory is *socio-psychologically* aligned. Consequently, the said theories can be grouped according to their object of study. The language learner and his language are pivotal to the psycholinguistic approaches. In this respect, these theories of second language acquisition are much like those of first language acquisition. The object of study of Acculturation Theory is much broader, for this theory aims at social and socio-psychological determiners of second language acquisition. That makes Acculturation Theory an approach that is different from any theory of first language acquisition. In other words, social and socio-psychological aspects prove to be of peculiar interest to second language acquisition.

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[8] Note that the terms theory and model are used interchangeably.

With a view to the special relevance of socio-psychological thinking on second language acquisition we proceed to sketch the most important socio-psychologically based theories. After that, we will indicate how and to what extent these theories have contributed to the content of our research.

Lambert (1963) gave the initial impetus to socio-psychological theorising about second language acquisition. He argued that someone who acquires a second language concurrently adopts behaviour that characterises members of another group. In order to acquire a second language there has to be an affinity for the members of the other group. The learner's attitudes to that group are believed to determine success in second language acquisition. His motivation is determined by these attitudes and by the instrumental or integrative orientation towards learning the second language.

Lambert's ideas have been further developed by Gardner (1985) in his *socio-educational model* of second language acquisition. The model centres on four classes of variables: social milieu, individual differences, (formal and informal) contexts and (linguistic and non-linguistic) outcomes (cf. Gardner 1985:147). The variable of social milieu indicates that second language acquisition takes place in a context in which cultural beliefs exist about the meaningfulness of acquiring the second language. Parents act as major intermediary between the social milieu and the learner. According to Gardner there are four types of individual differences that influence second language acquisition: intelligence, language aptitude, motivation and situational anxiety (or self-confidence). Again, we encounter the variable of motivation. Motivation is seen as important in determining how actively the learner works to acquire the second language. In turn, motivation is supposed to be effected by the support of the second language group and by the perception of that support. Attitudes are not explicitly included in the model, since they are seen as determinants of motivation, not of acquisition. Parents are thought to have an effect on the formation of youngsters' attitudes and motivation. Finally, the model assumes that all four types of individual differences relate to formal language experience, while, by contrast, intelligence and language aptitude play only secondary roles in informal language experience.

The main shortcoming of Gardner's socio-educational model is in the variable of social milieu, which is unsatisfactorily explored. Therefore, other scholars have targeted at just that variable. Schumann's *Acculturation Theory* is a first attempt to clarify the role of the social milieu (Schumann 1976, 1986). It accounts for second language acquisition by immigrants. Acculturation Theory takes second language acquisition as an aspect of acculturation. It holds that second language acquisition is determined by societal factors that promote or inhibit social distance between two groups. The assumption is that the greater the social distance, the more difficult it is for the second language learning group to acquire the language of the other group. Within a given context, there will be much individual variability in the rate and success with which a second language is acquired. Individual variability is due to the psychological distance between the learner and the second language group (Schumann 1976:143). Psychological distance is created by affective factors such as integrative or instrumental motivations.

Other attempts to elaborate on the role of the social milieu came from Clément (1980) and Giles (Beebe and Giles 1984, Giles and Byrne 1982, Giles and Coupland 1991). Clément's theoretical framework aims to formally link up individual second language acquisition to socio-structural characteristics of a

community. Its point of departure is the relative *ethnolinguistic vitality* of the first and second language group. The group with the greatest vitality is the most attractive community. The relative ethnolinguistic vitality influences the Primary Motivational Process. This consists, among others, of the desire to become a member of the other group (integrativeness). In bilingual settings, there is a Secondary Motivational Process, in which the factor of self-confidence has a prominent place. Self-confidence results from contacts with members of the other group. Both motivational processes are believed to be critical to the development of communicative competence. Clément (1980:148) assumes that members of a community share the same social milieu and therefore acquire the second language at a comparable level.

Giles' *Intergroup Model* essentially departs from the work of Gardner and Clément by its starting point that second language acquisition centrally is an intergroup process. The Intergroup Model focusses on the acquisition of a dominant second language by members of a subordinate group. It builds on speech accommodation principles (Beebe and Giles 1984) as it argues that factors leading to divergence resemble those inhibiting second language acquisition. The model supposes for instance that subordinate group members acquire native-like proficiency in the dominant language when perceived ingroup vitality is low (Giles and Byrne 1982:34-35). Such a condition promotes a strong motivation to acquire the second language. In other words, low perceived ingroup vitality provides an integrative orientation towards the dominant group. The model has been modestly revised (Giles, Garrett and Coupland 1988, Giles and Coupland 1991). The intergroup character has been accentuated thereby and Clément's construct of relative ethnolinguistic vitality has been inserted.

Relating the named socio-psychological theories to one another, we find that most of them acknowledge that motivation is crucial to any understanding of second language acquisition. However, there is disagreement about the determiners of motivation. In Gardner's judgement, other individual affective learner characteristics (such as attitudes) determine motivation. Clément and Giles take a different view. They are of the opinion that relative ethnolinguistic vitality or intergroup conditions are most influential to motivation.

Relatedly, we find a line of fracture between the stance of Lambert and Gardner on the one side, and the position of Schumann, Clément and Giles on the other. The former two chiefly draw attention to individual differences, while the others reactively conceptualise second language acquisition in view of the larger environment, that is, in terms of societal factors (Schumann), the social milieu (Clément) or intergroup processes (Giles).

The above outline of socio-psychological theories on second language acquisition makes clear that affective learner characteristics like *attitudes, self-confidence* and especially *motivation* rest at the heart of second language acquisition. Second, the outline puts forward that the larger *environment* in which second language acquisition takes place is of no small importance. Supposedly, the larger environment can directly and indirectly relate to the rate and success of second language acquisition.

The said elements, affective learner characteristics and the larger environment, bear witness to a fundamental contrast between first and second language acquisition (cf. Brown 1987:38-60). First language acquisition has been described and

analysed mainly in linguistic and cognitive terms. Likewise, second language acquisition has been placed in comparable psycholinguistic frameworks that focus on the *structure* and *order* of language acquisition. However, second language acquisition characteristically has been treated with regard to its socio-psychological determinants. Socio-psychological theories of second language acquisition centre around factors governing *speed* and *success* of second language acquisition.

Our study is not so much directed at psycholinguistic aspects of the acquisition of Frisian as second language. The linguistic variables studied mainly serve to indicate broadly the level of second language acquisition and we will examine whether (and to what extent) socio-psychological factors relate to the speed and success with which Frisian is acquired as second language.

We eclectically employ various elements of the socio-psychological theories treated. Our research focusses on second language acquisition among Dutch youngsters, and that is why Gardner's *socio-educational model* is of special interest to us. The socio-educational model draws attention to the role of the *parent*, and that will be further explored in our research (§§5.1.3 and 5.2.2). Moreover, the socio-educational model comprehensively accounts for the key factor of *motivation* and in line with that, the model involves the factor of (perceived) *motivational support*. These are topics that we are indeed concerned with in our study. We examine Dutch children's motivation to learn Frisian (§5.2.3). We also probe the issues of (perceived and actual) *parental motivational support* (§5.2.2) and (perceived) *motivational support of the second language group* (§5.2.4). Finally, Gardner's model includes the variable of *self-confidence*, which is also covered in our study (§5.2.5).

As distinct from the socio-educational model which - as said - does not explicitly incorporate attitudes, we devote ample attention to Dutch children's *attitudes* to Frisian. We investigate Dutch children's language attitudes (§§5.1.1 and 5.1.2), and the effect of parents on the formation of their childrens' attitudes to Frisian is examined too (§5.1.3).

In short, out of the theories discussed we distill that the affective learner characteristics *attitudes, motivation* and *self-confidence* need to be incorporated in our study. These characteristics repeatedly crop up in the socio-psychological theories treated, whereby motivation turned out to be conceived as a core-variable. It remains a debatable point whether motivation is regulated by other affective learner characteristics or rather by environmental forces. We will return to this in Chapter 5.

We also infer from the socio-psychological theories on second language acquisition that we should not only investigate affective characteristics of the learner. It seems wise also to trace the function of the larger *environment* in which second language acquisition takes place. Obviously, the contribution of the environment is *direct*, since the environment provides the learner with the linguistic input required. But the environment can also play an *indirect* role, as it may be influential to the just mentioned affective learner characteristics. These characteristics of the learner are probably not strictly individual features. They develop in interaction with the environment. By means of the factor called language environment (see §3.2.3) we investigate both the direct and indirect roles of the environment.

2.3 First language acquisition, language contact and language change

In the previous section we focussed on theoretical aspects of second language acquisition. This relates to the portion of our study that is concerned with the acquisition of Frisian as a second language. Now we direct our attention to the acquisition of Frisian as a first language. It should be emphasised that we examine the acquisition of Frisian as a first language in a context of *language contact* and *language change.*

As to the field of language contact we observe a dearth of theory. As regards the theoretical underpinnings of language contact studies, Markey (1987:14) contends that the bulk of these studies has remained 'alarmingly atheoretical'. Moreover, with respect to the scope of language contact studies he notes that many inquiries have remained at a microscopic phonological or strictly atomistic lexical level.

In an earlier section (§2.2.1) it was argued that the acquisition of Frisian as a first language may be complicated by the language contact situation in which Frisian children find themselves. As said, our study documents the acquisition of Frisian in a context of intense language contact. It should be noted that research into the acquisition of dominated first languages in such contact situations is remarkably scarce. This applies both to indigenous and non-indigenous minorities as well. Bilinguals' achievements are characteristically assessed almost exclusively in terms of their command of the (dominant) second language. Consequently, there is only scant attention to the acquisition of the (dominated) first language.

In this vein, Extra (1993) makes mention of a biased scientific interest among immigrant language acquisition studies in Europe. By and large, research among immigrant groups in Europe has typically centred on their acquisition of the host country's language as second language, rather than acquisition of their own immigrant group's first language. Only recently has there been more research interest in the acquisition of the migrant languages themselves (see Aarts et al. 1993, Di Luzio 1991 and Pfaff 1991).

An analogous biased situation can be observed in the case of research among indigenous European language minorities. Studies on first language acquisition among indigenous minority groups are similarly under-represented. Hickey (1989) remarked for instance that the study of the acquisition of Irish as first language still is in its infancy. The same is true for Frisian and many other indigenous minority languages. That is unfortunate, the more so because child language acquisition can be a potent source of language change, especially in contact situations. We will return to this.

As to the field of language change we also observe a shortage of theory. There has been a development in traditions, from historical linguistics to modern dialectology and sociolinguistics, but fully worked-out theories of language change of a more general scope are missing from each of these lines of research. Especially modern dialectology and sociolinguistics, which are both empirical by nature, seem rather data-driven. Much is known about what changes took place, but less about why these occurred. One of the factors as to the question of why it is that a worked-out theory of language change is still missing, is the multi-facetedness of the phenomenon.

It has been suggested that the locus of language change appears in different ways:

the language of an individual speaker changes over time, and the language changes from one generation to the next (Kristensen and Thelander 1984:226). Child language is particularly relevant with an eye to intergenerational change. However, opinions on the contribution of children to language change diverge highly. Andersen (1978:21) concluded that "the ultimate source of dialect divergence - and of linguistic change in general - is the process of language acquisition, in which the speakers of a language impose form on the fluctuating and amorphous substance of speech". In similar lines, Dressler (1978:150) claimed that "child language acquisition is thought to be the principal source of phonological change by most linguists today". Likewise, Hoppenbrouwers (1990:33-34) recently pointed out that the phase of language acquisition is of paramount importance. He argued that one finds an upsurge in linguistic tolerance among parents, who are less oriented towards linguistic conformity (Hoppenbrouwers 1990:44). Moreover, Mougeon and Beniak (1991:111) argue that there are linguistic changes which are the sole responsibility of children. Finally, Boelens' (1987b) work on the acquisition of breaking (see §4.2) was based on his belief that child language potentially acts as an indicator of language change in Friesland.

Other scholars have raised entirely contrasting viewpoints. Focussing on sound change, Drachman (1978:138) remarks that "the role of primary acquisition in language change seems to have been exaggerated" and Aitchison (1991:173) is of the opinion that children have little of importance to contribute to language change, because they do not form an influential social group.

We agree with those authors who underline the contribution of children to language change. Central to an understanding of the role of first language acquisition in language change is the notion of *imperfect learning*. In this respect, Mougeon and Beniak (1991:4) argue that insufficient exposure to and use of a language results in its imperfect learning. Along similar lines, it has been noticed that an imperfect acquisition of a dominated first language occurs when this language is incompletely transferred from one generation to the next (Extra 1993). This may be due to quantitatively and/or qualitatively diminished *input conditions*. When young minority children acquire their first language in an environment in which the other language has a monopoly position, one can speak of quantitatively reduced input. There is a huge amount of input in the second language and this can be at the cost of first language input. For example, Verhoeven and Boeschoten (1986) made mention of a stagnated acquisition of first language skills by Turkish children living in The Netherlands.

Another complicating situation in which one tends to expect quantitatively and also qualitatively diminished input conditions, is found among minority children who are massively exposed to a dominant second language and whose first language can be characterised by relatively strong internal variation. This can be observed among children who speak an indigenous minority language at home. The minority child is confronted with inconsistent input, which possibly delays or stagnates the acquisition of his first language. In both types of reduced input conditions, minority children may acquire their first language less fully. A stagnated process of first language acquisition can ultimately lead to a wider process of structural remoulding of the minority language.

Finally, it is worthy of mention that not only first language acquisition may relate to language change. Under certain conditions second language acquisition

also enhances change of subordinate languages. This is plausible when a minority language is massively acquired by non-native speakers. Thomas (1991:53) reports a Welsh example of this. He concludes that 'L2 children' may lead the development of certain changes in spoken Welsh.

2.4 Intra- and interlinguistic change

The distinction between intra- and interlinguistic change is not a clear-cut distinction that is easy to apply. Intralinguistic changes allude to inherent developments within a particular language. A fine example is the reduction of complex consonant clusters. Intralinguistic changes are the result of linguistic and psychological factors which reside in the structure of a language and in the minds of its speakers (Aitchison 1991:106), such as ease of articulation and a tendency towards linguistic regularity.

The tendency towards linguistic regularity has often been described by the concept of *simplification* (or reduction)[9]. This concept has been variously understood, so it needs to be handled with care. According to Mougeon and Beniak (1991:4) simplification applies to "internal restructurings which bring about a greater degree of regularity or transparency in the language". Simplification is often observed in the domain of morphology. It can take place in the shape of analogical levelling, a process that promotes paradigmatic uniformity (cf. Dorian 1977:27). Simplification can be the linguistic outcome of a restriction of the use of a language. Mougeon and Beniak (1991:4) argue that "it appears well established by now (...) that insufficient exposure to and use of a language results in its imperfect learning, as reflected not just in interference of various types but also in internal restructuring of various kinds, most often if not always interpretable as cases of simplification".

Interlinguistic changes are contact-induced. The degree and type of language contact determines the level of change. In principle, the most detachable elements are first taken over. Many have put forward that words are the least structurally embedded and therefore the most easily detachable elements.

Moreover, one should distinguish contact situations that entail linguistically related varieties from situations involving structurally dissimilar varieties. The closer the language varieties, the greater the chance that interlinguistic changes occur.

Contact-induced language changes have been described by the concept of *substitution*. Substitution has been denoted as the replacement of a language element of a less powerful variety by its equivalent in the dominant language (cf. Hagen and Münstermann 1985:79).

In the foregoing, we separated out intra- and interlinguistic changes at a conceptual level. However, in practice it is hard to decide whether a certain change is traceable to internal or external forces alone. Frequently the change will result from an interaction between both forces. In this connection, Mougeon and his associates (1985:457) stated that "interlingual influence is far from easy to prove

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[9] Note that many writers use the concepts of simplification and reduction as synonyms.

when there are (and there usually are) competing internal explanations for the suspected cases of transfer". Similarly, Weinreich et al. (1968:188) warned against one-sided explanations of the development of language change, and Labov (1972:181) concluded that it can no longer be argued that a changing linguistic system is autonomous in any serious sense. Labov (1979:18) argues that language change is the product of an interaction between longstanding linguistic trends and pressures of the immediate social context. Further, Aitchison (1991:117) wrote that "foreign elements make use of existing tendencies, and commonly accelerate changes which are already under way". In sum, caution must be used in tracing internal or external inciting forces that operate in language change.

2.5 Gradualness of language change

Language changes are thought to be disseminated outwardly along a social axis and inwardly along a linguistic axis (Aitchison 1991:76). Another division is made by Hinskens (1992:25), who distinguished gradualness in the time dimension and in the geographic and linguistic sense. Temporal and linguistic gradualness seems of particular interest to us. Geographic gradualness is less so, because the linguistic variables under research hardly show regional spread[10].

As for the temporal aspect of language change, Aitchison (1991) mentions that change quite often proceeds via the 'slow-quick-quick-slow' pattern. Language change starts step-by-step, then comes a sudden take-off in which the change proceeds fastly, and finally it fades out. In other words, language change follows a wave pattern (cf. Kristensen and Thelander 1984:235). Language change is therefore most easily perceptible in its mid-phase. Moreover, the speed of change may differ by generation of speakers. In this respect, Johnson (1976:168,171) remarked that language change begins slowly and then accelerates in succeeding generations.

A discrepancy between intra- and interlinguistic change is conceivable as regards temporal gradualness. Intralinguistic changes are steady and relatively slow in many cases, while interlinguistic changes can be abrupt to a greater or lesser extent and may advance relatively fast. One should bear in mind that the degree of language contact effects the pace of change, high contact sometimes leading to rapid change.

As to the linguistic side of language change, it should be noted that change may relate to the frequency in which linguistic variables occur. High frequency often acts as a barrier (Anttila 1989:187-88). Next to frequency, the degree of transparency of linguistic variables may be relevant, transparent features showing higher resistance to change than opaque ones.

Further, we recall that the linguistic levels of phonology, lexicon, morphology and syntax are not equally susceptible to outside change. Generally speaking, "the more structural a feature is, the less likely it is to be borrowed" (Haugen 1950:225).

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[10] Note however that the phenomenon of breaking in Frisian is regionally bound (see §3.2.1).

Although we agree with Hagen and Münstermann (1985:82) that there is no universal order of change between linguistic components, we will cautiously indicate some tendencies proposed in the literature. Hagen and Münstermann (1985:83) stated that phonology is a part of language that is very resistant to change. However, they added to this that certain phonological properties belong to the primary features of a dialect and can therefore just be early candidates for change (cf. Hoppenbrouwers 1990:44). Van Bree (1985) disclaims the idea of phonology being the most solid sector of language. He suggests that the lexicon is the area that is most vulnerable to change, followed by phonology and morphology, and finally syntax (Van Bree 1985:30). Another sequence was embodied in Dauzat's Law, which was already formulated in the Twenties. Dauzat's Law says that "the lexicon is most exposed to influence; then come the sounds, then syntax; while morphology, the fortress of a language, surrenders last" (Dauzat, quoted by Markey 1987:4). Romaine (1989:63) presents yet another sequence of change. She asserts that many have accepted the following general hierarchy of borrowing: lexicon > morphology (derivational > inflectional) > syntax.

In conclusion, the above orders of change, as suggested in the literature, reflect the conception of language change being structurally directional. It is generally taken for granted that certain sectors of language are affected before others. Opinions diverge as to the precise order to be expected, but there is consensus about the lexicon being a less solid domain of language, while syntax is often seen as a highly stable component.

2.6 Acquisition of a minority language as second language

Minority children acquiring a dominant second language often do so at the expense of their first language. An opposite kind of bilingualism occurs when majority group children acquire a non-prestigious variety as second language. There is then no competition between the languages. The minority language is complementary and added to the dominant first language, and that can form a linguistic, cultural and psychological enrichment for the language learner. A portion of the present study conceivably concerns this type of additive bilingualism, for one can put the acquisition of Frisian as second language among Dutch children in the framework of enrichment. In Chapter 4 we will examine whether an additive type of bilingualism actually occurs among our sample of Dutch children.

Some of the socio-psychologically founded theories of second language acquisition discussed before (§2.2.3) can in principle pertain to the acquisition of prestigious and subordinate languages as well. That does not really apply to Giles' Intergroup Model, because that is basically oriented towards the acquisition of a dominant second language by members of subordinate groups. One should also remind that Schumann's Acculturation Theory was originally designed to account for the acquisition of dominant languages by immigrants (Schumann 1986:389). Moreover, the construct of instrumental orientation typically refers to the desire to learn a profitable second language. In short, we argue that on the face of it, a good deal of socio-psychological theorising on second language acquisition is biased towards the acquisition of powerful second languages.

By the same token, looking at American empirical studies on second language

acquisition one finds a clearly biased interest in the acquisition of dominant languages (cf. Extra and Verhoeven 1993:3). One of the few exceptions is Cohen's work on Spanish immersion programmes (Cohen 1974). Tellingly, the abbreviations *ESL* and *FSL* (English/French as Second Language) are widely used in the American literature on second language acquisition, while - despite the fact that Spanish is the most manifest minority language in the United States - the abbreviation *SSL* (Spanish as Second Language) is quite uncommon.

A similar biased interest is found for studies on second language acquisition in regions where European indigenous minority languages are heard. The focus of second language acquisition studies in these regions has been on indigenous minority children's command of their second language, whereby the attainment of majority children acted as point of reference. This was probably fed by a conception of bilingualism as disadvantage.

Only subsequently has attention been directed to minority children's command of the indigenous language and to majority children's achievements in the dominated language. This development often has to do with the assessment of effects of bilingual school programmes[11]. Relatedly, inquiries into the acquisition of the indigenous language were mostly directed towards school-based language skills. Thus, the basic skills of understanding, speaking, reading and writing have typically been investigated, frequently in order to assess the effects of bilingual school programmes (cf. De Jong and Riemersma 1994, *EIFE*-3 1991, Hall 1990, Harris and Murtagh 1987/88, Hickey 1992, Price 1980). The above pattern has been discernible in Frisian studies on bilingual achievements among children living in the province. Whereas earlier research concentrated on Frisian children's command of Dutch (cf. Boersma 1958, Post 1951, Wijnstra 1976), the latest research has also examined Dutch children's proficiency in Frisian (cf. De Jong 1993, De Jong and Riemersma 1994). This shift of interest has to do with changed views about bilingualism in Friesland, in which bilingualism is no longer seen as a drawback.

Only recently have there been a few more (socio)linguistically oriented studies on the acquisition of European indigenous minority languages by majority children (Boelens 1987a, Hickey 1989, Rees et al. 1993, Owens 1992, Siencyn s.a., Thomas 1991). However, whereas it has often been implied that second language acquisition is determined to a greater or lesser extent by socio-psychological factors (see §2.2.2), only a little second language acquisition research into European indigenous minority languages has been conducted from a socio-psychological point of view (see however Cenoz and Valencia 1993, Sharp et al. 1973).

In sum, the portion of our study that deals with the acquisition of Frisian as second language deviates from the usual pattern observed in second language acquisition research in that it focusses from a sociolinguistic and socio-psychological angle on the acquisition of a less powerful second language.

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[11] Note that such assessments have often been scarce (cf. Baker 1985:110-111).

Chapter 3: Research questions and method

3.0 Introduction

This chapter describes the ins and outs of the research project. The chapter commences by presenting the research questions guiding the study and the design of study (§3.1). An account of the research variables is given in section 3.2. The research variables are divided into linguistic variables (§3.2.1) and socio-psychological variables (§3.2.2). Section 3.2.3 then describes the contextual variable of language environment. Next, we provide information on the subjects (§3.3). In section 3.4 we account for the instruments employed to assess the research variables. Lastly, we report on the way the tests and questionnaires were administered (§3.5).

3.1 Research questions and design

The present study aims at getting insight into the acquisition of Frisian as first and second language among primary school children. As far as language acquisition is concerned, our focus is on the knowledge of specific formally defined elements of Frisian phonology, lexicon, morphology and syntax. The reason behind this is that the extent to which Frisian children succeed in acquiring these linguistic elements may be related to more or less structural changes which are possibly occurring to the Frisian language. Moreover, knowledge of these linguistic variables can indicate the acquisition of Frisian as second language.

Our prime research interest differs with respect to Frisian as first language and Frisian as second language. The different emphases of Chapters 4 and 5 reflect that varying interest. Chapter 4 focusses primarily upon sociolinguistic aspects of Frisian as first and second language, while Chapter 5 is mainly about socio-psychological facets of Frisian as second language.

Frisian as first language

We indicated before that first language acquisition of an indigenous minority language can lead to language change (§2.3). The connection between first language acquisition and language change comes up for discussion in Chapter 4.

In particular, our study addresses the following research questions on Frisian as first language:

a. What is Frisian children's knowledge of Frisian?
b. How does their knowledge of Frisian relate to the variables age, gender and language environment?
c. How does their knowledge of Frisian relate to their attitudes to the language?
d. Does Frisian children's knowledge of their first language differ from Frisian parents' knowledge of Frisian?

These questions show that the emphasis is on Frisian children's knowledge of their first language and on a number of personal and contextual factors that may be associated with it. The independent variables distinguished (age, gender and language environment, see question *b*) are considered for different reasons. Age

(or grade level) is incorporated in view of the aim of the study to chart cross-sectionally the acquisition of Frisian. The variable of gender is taken into consideration to examine the general notion that in first language acquisition girls enjoy a rate advantage (cf. Larsen-Freeman and Long 1991:204). In particular the possible link between the knowledge of Frisian and the contextual factor of language environment matters greatly, as the three environments distinguished comprise language contact situations with different amounts of exposure to Dutch.

Relating language attitudes to Frisian children's knowledge of Frisian (question *c*) may perhaps appear less self-evident. However, it has been recognised in the literature that language attitudes may play a role in first language acquisition (Schmidt 1985) and for that reason we feel justified in linking Frisian children's language attitudes to their knowledge of the first language.

Last, but not least we attempt to record language changes in present-day Frisian by means of an intergenerational comparison whereby the linguistic achievements of Frisian parents are used as points of reference for the achievements of the children (question *d*).

Frisian as second language

In the previous chapter it was put forward that the rate and success of second language acquisition is often thought to depend on affective characteristics of the learner like attitudes and motivation (§2.2.2). As regards Frisian as second language the current study therefore closely examines such characteristics of Dutch children and the study traces the possible relationship between these socio-psychological variables and the pace and success with which Dutch children acquire Frisian. All this is worked out in Chapter 5.

Our study purports to answer the next research questions as for Frisian as second language:

a. What is Dutch children's knowledge of Frisian?
b. How does their knowledge of Frisian relate to the variables age, gender and language environment?
c. What is Dutch children's socio-psychological disposition towards Frisian in terms of their attitudes to Frisian, their motivation for learning Frisian, and their self-confidence in the language?
d. How does their socio-psychological disposition towards Frisian relate to the variables age, gender and language environment?
e. How does their socio-psychological disposition towards Frisian relate to that of Dutch parents?
f. How does their socio-psychological disposition towards Frisian relate to their knowledge of the language?

As is clear from the questions detailed above, Dutch children's knowledge of Frisian (question *a* and *b*) and their socio-psychological disposition towards the second language (question *c*) are at the centre. The socio-psychological disposition towards Frisian consists of the affective learner characteristics attitudes, motivation and self-confidence, whereby motivation is considered of utmost relevance. In consequence, we shall thoroughly examine Dutch children's motivation for learning Frisian.

We investigate the relationship between the independent variables age, gender and language environment on the one hand and Dutch children's knowledge of

Frisian on the other (question *b*). This is done analogous to the analysis among the Frisian children. The link between knowledge of Frisian and the factor of language environment is again of great interest, since the language environments distinguished comprise surroundings with different amounts of exposure to the second language.

We will also examine a number of factors that may influence the formation of Dutch children's socio-psychological disposition towards Frisian. In this respect, attention is directed to the influence exerted by the contextual factor of language environment in particular (question *d*), but also to the role of parents (question *e*).

In view of the importance attached in socio-psychological theorising on second language acquisition to the three just mentioned affective learner characteristics, we want to find out whether Dutch children's socio-psychological disposition towards Frisian affects their knowledge of the second language (question *f*).

Research design

The design of our study is determined by the research questions posed. The selection of research variables considered of relevance has been guided by theoretical considerations. As regards the preference of research variables, it was decided to apply a methodology of focussed description (cf. Larsen-Freeman and Long 1991:17). This implies that our study is oriented towards a fixed set of linguistic and socio-psychological variables, which is determined beforehand.

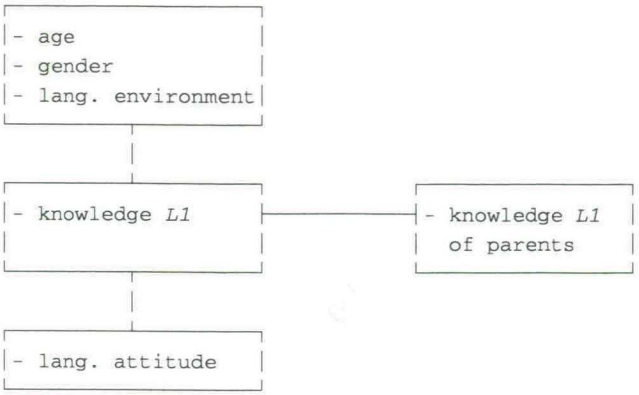
The study includes a substantial number of informants (see §3.3). Given the large number of informants, a correlational approach is employed. That enables us to examine relations between independent and dependent variables.

To investigate developments in the acquisition of Frisian as first and second language among primary school children, linguistic data were gathered cross-sectionally. It was decided to compare the data between two age levels, i.e. grades five and eight. Grade eight forms the highest level of primary schooling in The Netherlands. Younger children would probably meet too many problems when performing the tasks required. According to the cross-sectional paradigm, progress between successive age groups can be ascribed to language acquisition that has taken place. For one of the linguistic variables under investigation this assumption has been empirically confirmed. Earlier research on the Frisian breaking phenomenon has shown that cross-sectional data on the acquisition of breaking among school children neatly parallelled longitudinal findings (Boelens and Ytsma 1989a, 1989b). The magnitude of the difference between the two age groups is indicative of the pace of language acquisition.

To chart possible language changes in Frisian, linguistic data were collected among Frisian children and some of their parents. A comparison between the achievements of the parents and the performance of the older Frisian pupils (grade 8) has been made. In some sense, this implies an application of the apparent time method. The pros and cons of that method in this particular case are discussed in the section on intergenerational differences (§4.8).

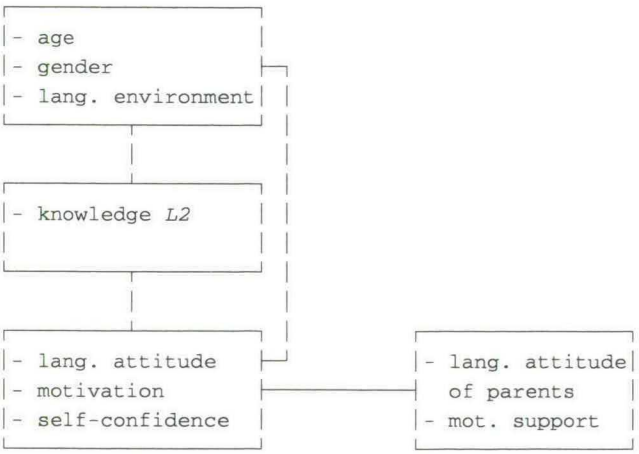
The flow charts below summarise the design of our study.

Frisian as first language (L1):



The scheme shows that Frisian children's knowledge of Frisian is of primordial interest.

Frisian as second language (L2):



As regards Dutch children the focus is mainly on their socio-psychological disposition towards Frisian (language attitude, motivation and self-confidence) and on their knowledge of the language.

3.2 Research variables

In this section we delineate the research variables under examination. These are briefly introduced. The linguistic variables are dealt with in section 3.2.1. Socio-

psychological variables are treated after that (§3.2.2). Finally, the contextual factor called language environment is introduced (§3.2.3).

3.2.1 Linguistic variables

It was mentioned earlier that sociolinguistic studies on Frisian carried out so far have focussed on phonological, morphological or lexical aspects of the language (see §1.2.2). We decided to take all linguistic levels into consideration. Thus, syntactical elements will also be examined.

A further decision was to include the three most important examples of structural borrowing of Frisian from Dutch. According to De Haan (1990:105) these are the morphological and syntactical variables of *je*-verb conjugation, diminutive formation and verb-raising (i.e. word order in the verbal complex).

Breaking and lexical knowledge were incorporated too. The argument to bring in the phenomenon of breaking was twofold. First, breaking is probably the most characteristic and distinct aspect of Frisian phonology (Tiersma 1979:64). Second, the outcomes obtained by the present study can be compared to an earlier empirical inquiry among primary school children (Boelens 1987b, Boelens and Ytsma 1989a 1989b). Lexical knowledge was included because - as said - it was decided to cover all linguistic levels and because the lexicon is an area that is vulnerable to change (see §2.5).

In short, the linguistic variables under research are: (1) breaking (phonology), (2) diminutive formation (morphology), (3) *je*-verb conjugation (morphology), (4) lexical knowledge (lexicon) and (5) verb-raising (syntax). This particular set of variables is included in our study primarily with an eye to the acquisition of Frisian as first language. The linguistic variables selected are of great interest here, as the extent to which Frisian children succeed in acquiring these linguistic elements may be relevant to more or less structural changes occurring to the Frisian language. Besides, the linguistic variables looked at comprise useful indicators of the pace and success with which Dutch children acquire Frisian. The linguistic variables are successively worked out in the remainder of this section.

Breaking

The rule of breaking involves the alternation of rising and falling diphthongs. There are four breakable diphthongs: */oe/, /oa/, /ie/* and */ea/*. According to Tiersma (1985:20-24) breaking is very common in nouns, where the falling diphthong in the singular is converted to the corresponding rising diphthong in the plural or in the diminutive. An example is the noun *stoel* (chair) which gets *stuoltsje* in the diminutive and *stuollen* in its plural form. The fact that breaking takes place in diminutives and plurals is understandable if one bears in mind that breaking happens primarily when another syllable (diminutive or plural suffix) follows a breakable diphthong (De Graaf and Tiersma 1980). It may happen that the diminutive is broken, whilst the plural remains unbroken. The reverse, plural broken and diminutive unbroken, does not occur. These phenomena probably relate to the influence of the following syllable (De Graaf and Tiersma 1980).

The rule of breaking in the diminutive and plural is relatively opaque (Tiersma 1983:62). It applies to a closed set of nouns. According to Tiersma (1985:22) roughly one half of the potential inputs to the rule actually undergo it. Beside broken nouns like *doar* (door) and *fear* (feather), there are unbroken ones

like *boar* (drill) and *bear* (bear). Thus, breaking is unlearnable as a set rule. It has to be acquired by lexicalisation, that means word by word. Moreover, as regards plural and diminutive formation, breaking is functionally redundant, for the plural and diminutive are already signalled by the suffixes concerned. Therefore, leaving out breaking does not cause any communicative lack of clarity.

Breaking is a highly distinct feature of Frisian phonology. Miedema (1958) points out that breaking does not occur in the area of Friesland known as the *Súdwesthoeke*. Instead of breaking, shortening of vowels is applied in local *Súdwesthoek* Frisian. Hof (1933:14-16) remarked that the absence of the rising diphthongs */ua/* and */uo/* is the most important difference between *Súdwesthoek* Frisian and standard Frisian.

Diminutive formation

Diminutive formation is very productive in Frisian (Tiersma 1985:61). The suffixes concerned do predominantly have the semantic function of marking smallness, but they may also express affect (cf. Tamminga 1982). The Frisian diminutive is principally formed by adding */ke/*, */tsje/* or */je/* to the noun stem. The following rules apply (Tiersma 1985:59):

/ke/ is appended to a stem ending in a vowel or diphthong, or in [*m p f s r*];
/tsje/ is the suffix following [*l n t d*];
/je/ is used after a stem which terminates in the velars [*k x y*]. The */ng/* becomes */nk/* before the diminutive.

According to De Haan (1990:109) Frisian has two basic forms, */ke/* and */tje/*, while standard Dutch has only one underlying diminutive suffix: */tje/*. The Frisian */ke/* suffix is characteristic. It is absent in standard Dutch, though the same suffix can be found in various Dutch dialects.

Je-verb conjugation

Frisian verbs can be classified into regular verbs, in which the conjugation is systematically determined by rule, and irregular ones. Regular verbs can be further subdivided into Class 1 verbs (infinitive ends in */e/*) and Class 2 verbs (Tiersma 1985:70-71). Infinitives of the latter class terminate in */je/* and are therefore called *je*-verbs.

The verb *betelje* (to pay) illustrates the conjugation rules, the Dutch rules are in brackets.

infinitive	*betel-je*	(betalen)		
past participle	*betel-le*	(betaald)		
	present		past	
1 singular	*betel-je*	(betaal)	*betel-le*	(betaalde)
2 singular	*betel-lest*	(betaalt)	*betel-lest*	(betaalde)
3 singular	*betel-let*	(betaalt)	*betel-le*	(betaalde)
	present		past	
1 plural	*betel-je*	(betalen)	*betel-len*	(betaalden)
2 plural	*betel-je*	(betalen)	*betel-len*	(betaalden)
3 plural	*betel-je*	(betalen)	*betel-len*	(betaalden)

Note that the conjugation of the present and past tense of 2nd singular is identical.

Lexical knowledge
As mentioned before, Frisian and Dutch are typologically related languages. This can easily be seen from the lexicon of the languages. Dutch and Frisian share a common stock of words. Other words differ greatly between Dutch and Frisian. An example is the Frisian noun *tsiis* which resembles its English equivalent *cheese*, whilst the Dutch word *kaas* has close affinity with German *Käse*. In still other cases, Frisian and Dutch words differ phonologically. Compare Frisian *par* (pear) to Dutch *peer*.

Verb-raising
It has been stated that Frisian syntax corresponds in large measure to the Dutch system (see §1.1). Nevertheless, verb order differs in important ways. We will pay attention to word order in the verbal complex, concentrating on main clauses. Both in Frisian and in Dutch, verbs accompanied by modal or auxiliary verbs are placed in one cluster that is found in sentence final position. In main clauses, the finite (modal or auxiliary) verb is not included in the verbal complex. It is located in sentence second (or first) position. Frisian word order in the verbal complex is the reversed order of the order in Dutch. In this respect, Frisian order is much as in German and it also resembles some Dutch dialects (cf. Nuijtens 1962:170). The example below shows the contrast between verb order in Frisian and Dutch:

Dutch:	Frisian:
Jij zou op mijn verjaardag kunnen komen	*Do soest op myn jierdei komme kinne*
(You should on my birthday can come)	(You should on my birthday come can)

Another difference between Dutch and Frisian verb order is that Frisian order is fixed in principle, while Dutch allows for inversion in some cases (cf. Den Besten and Broekhuis 1989, Haeseryn 1990 and Stroop 1970). This is exemplified by the next sentences.

Dutch (inversion):	Frisian (fixed):
Jij moet dat glas niet laten vallen	-
Jij moet dat glas niet vallen laten	*Do moatst dat glês net falle litte*
(You must that glass not fall let)	(You must that glass not fall let)

The Frisian verbal complex allows for one sequence only (*falle litte*), whereas the Dutch system permits two orders. Note that *laten vallen* is clearly preferred, but *vallen laten* is not ungrammatical. The grammatical acceptability of the latter sequence is probably regionally bound.

3.2.2 Socio-psychological variables

In this section, we describe three socio-psychological variables included in the study. These variables - language attitudes, motivation and self-confidence - are to be viewed as important affective learner characteristics influencing pace and success of second language acquisition (Van Els et al. 1984:115-124). Motivation comprises the key variable.

Language attitudes
The concepts of attitudes and motivation are not always clearly distinguished in the literature. Therefore, we first attempt to define the concept of language atti-

tude. Attitudes to language are more or less stable reaction patterns towards a particular language or speakers of that language. Language attitudes can be determined by various individual and environmental factors (cf. Baker 1992:41-47). Language attitudes are supposed to be multi-dimensional. A distinction is often made between cognitive, affective and conative components (Knops 1987: 22-23). Because of the conative (behavioural) component, language attitudes and (second) language acquisition may relate to one another. The object of language attitudes can be divided into attitudes towards a language (variety) as such, and attitudes towards language as group symbol. The latter is clearly evidenced by the social evaluation of language. This social evaluation is frequently divided according to two different underlying dimensions: *status* (or prestige) and *solidarity* (Ryan 1979).

Motivation

Motivation can be defined as the sum of factors which state the ground for behaviour. In that respect, motivation resembles the conative component of attitudes. The concept of motivation has a strong connection with second language acquisition (O'Brien 1977:191), since motivation holds the combination of the effort and desire to reach the goal of second language proficiency (Gardner 1985:10).

In principle, the motivation to learn a second language can be *instrumentally* or *integratively* oriented. An instrumental orientation implies that the second language is learned because of utilitarian motives: second language proficiency is (economically) profitable. A learner who is instrumentally oriented towards the second language is mostly status-driven (Vousten, Bongaerts and Knops 1989: 133). By contrast, an integrative orientation supposes that the second language is learned for socio-emotional reasons: one can better take part in the second language group if one knows the language of that group. Frequently, someone who learns a second language for integrative reasons will be guided by considerations of solidarity. It has been concluded that the relative importance of integrative or instrumental orientations depends on the context in which the second language is learned (Van Els et al. 1984:119).

(Perceived) motivational support

The motivation of second language learners can be fed by the *second language group*. The peer group seems to be of great importance among children. Second, children's motivation can be fostered by their *parents*. In connection with the contribution of parents, Gardner (1985) distinguishes passive and active roles. The passive contribution of parents is less conscious, it is effective via parental language attitudes. The active role of parents is more conscious. It is realised by a whole range of supportive behaviours like buying books in the second language, correcting children when they do not speak the second language properly, and so on.

Finally, we can distinguish between *actual* (objective) and *perceived* (subjective) motivational support. For instance, parents may correct their children when they do not speak the second language properly (actual support), and the children may form their own idea of the degree to which such support occurs (perceived motivational support).

Self-confidence
The relation between self-confidence and second language acquisition has received relatively scant attention in research on effects of affective learner characteristics. Nevertheless, it seems that the language learner's self-confidence in his second language can be an influential trait. Lack of self-confidence may express itself by a high level of anxiety about speaking the second language (Gardner 1985), and by a withdrawal of interactions with target language speakers, thus hampering second language acquisition. Conversely, it appears that low anxiety may be conducive to the acquisition of a second language (Krashen 1987:31).

3.2.3 Language environment

In section 1.1 it was mentioned that Friesland has become linguistically more heterogeneous during the last few decades. Within the whole territory, there are areas where Frisian is more frequent as spoken language. In other parts however, spoken Dutch overrules Frisian. In still other areas frequency of the everyday oral use of both languages is more or less balanced. This partition according to local language relationships is represented in our study by the factor of language environment. This factor is operationally defined by the percentage of Frisian-speaking pupils at school. Thus, language environment refers to the degree of 'Frisianness' of the child's everyday environment. It is a coarse measure of the relative frequency of oral usage of Frisian (and Dutch). A tripartite division of schools was made according to language environment:

A school population 10-25% Frisian-speaking pupils;
B school population 45-55% Frisian-speaking pupils;
C school population 75-90% Frisian-speaking pupils.

The factor of language environment may *directly* relate to the acquisition of Frisian as first and second language as each environment provides different amounts of input for first and second language respectively. A predominantly Frisian environment (C) creates a favourable context for Dutch children to learn Frisian as second language. By contrast, a language environment that is non-Frisian for the greater part (A) may undermine the acquisition of Frisian as first language.

The language environment may also *indirectly* correspond to the acquisition of Frisian as second language. As mentioned in Chapter 2, Dutch children's language environment conceivably influences their socio-psychological disposition towards the language. For example, in a strongly Frisian environment they may be better motivated to espouse Frisian than in an environment where Frisian exists to a much less pronounced degree.

3.3 Subjects

In October 1988 a questionnaire on Frisian in primary schooling was sent to all 572 primary schools in Friesland (see *Inspectie van het Onderwijs* 1989). Of these, 539 schools replied, so the response percentage was very high (94%). On the basis of data gathered through this questionnaire schools were selected for participation.

The schools were selected according to language environment, that means the percentage of Frisian-speaking children the schools reported (see §3.2.3). Only schools falling into the following three categories were invited to participate: (A) 10-25% Frisian pupils, (B) 45-55% Frisian pupils and (C) 75-90% Frisian pupils. Three other criteria were applied: (1) the schools had to teach Frisian as a subject in the middle and higher grades of the school (grades 5 to 8), but for no more than 45 minutes per week, (2) the schools had to use Frisian as medium of instruction, but for no more than 10-30% of the curriculum, and (3) the schools had to include at least ten pupils both in grade five and eight.

As a result of the application of the two criteria about the place of Frisian as subject and as vehicle of instruction, the schools taking part in the study constitute quite ordinary schools in the province[12]. The third criterion was applied for practical reasons of feasibility.

A total number of 42 elementary schools met all four criteria. These schools were invited to participate. It turned out that 31 schools agreed to cooperate. School category (i.e. language environment) A included seven schools, category B had ten schools and fourteen schools belonged to environment C. Within each category, schools do not or hardly differ with respect to the position of Frisian as medium of instruction and school subject. Between the three categories, the principal difference is in the degree of 'Frisianness' of the language environment (A to C).

The language background of the children was determined by two different indices, which had to match. First, the teachers were asked to indicate the home language of their pupils (other-report). They could make a choice between six categories: (1) Frisian (all members of the family almost exclusively speak Frisian), (2) Dutch (all members of the family almost exclusively speak Dutch), (3) Frisian regional dialect, (4) non-Frisian regional dialect, (5) foreign language, and (6) mixed. Second, the children themselves were asked to indicate their own home language (self-report). They could choose between five relatively clear-cut alternatives: (1) only Frisian, (2) predominantly Frisian, (3) only Dutch, (4) predominantly Dutch and (5) other.

A child was classified as 'Frisian-speaking' if the teacher opted for the first answer category (Frisian), and the child ticked category (1) or (2) (only/predominantly Frisian). A child was classified as 'Dutch-speaking' if the teacher selected the second answer category (Dutch), and the child ticked the third or fourth category (only/predominantly Dutch). Frisian-speaking and Dutch-speaking children will for reasons of convenience be designated below as *Frisian* and *Dutch* children.

In the vast majority the home language indices of teachers and children were in accordance, which indicates that the teachers were remarkably well aware of the linguistic background of their pupils. Only for 2.5 percent (n=23), the indices of home language did not match. These children were excluded.

The sample of children was drawn from grades five and eight of primary school. Generally speaking, the youngest children (grade 5) are nine or ten years of age, while the children in the highest grade (8) are twelve or thirteen years old.

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[12] Remember the modest position of Frisian as subject and medium of instruction at primary level (see §1.1).

It is of interest to check whether the estimation on home language given by the schools in the forementioned 1988 questionnaire matches the actual distribution of home language per language environment. Therefore, Table 3.1 gives the actual proportion of Frisian and Dutch children per school category.

Table 3.1: Percentage of Frisian and Dutch children per language environment

L1	A	B	C	N total
Frisian	23	53	78	523
Dutch	77	46	22	398

The above distribution of home language per language environment warrants the conclusion that the estimation on home language given by the schools comprises a valid tool for classifying the schools in the three categories distinguished. It turns out that school category A, which on the basis of an estimation of the schools contained 10-25% Frisian pupils, has indeed a population with about one quarter of Frisian children. Similarly, categories B (45-55% Frisian children) and C (75-90% Frisian children) do actually have a school population of 53 and 78% Frisian pupils respectively.

The two group tests (on *je*-verb conjugation and verb-raising, see §3.4.1) were administered to all Dutch and Frisian children from grades five and eight. It was decided to process only the data of those children who also executed the individual language tests (n=410, see Table 3.2). This facilitates a comparison of test performance among the same group of children.

For practical reasons the three individual tests (on lexical knowledge, diminutive formation and breaking) were done by a selected number of Dutch and Frisian children. In school category A, the individual tests were carried out by all Frisian children and an approximately equal number of Dutch children, who were chosen at random. In category C, the individual tests were done by all Dutch children and nearly the same number of Frisian children, who were randomly selected. In the intermediate category (B), the individual tests were done by approximately half of the Frisian and Dutch children, both selected at random.

Table 3.2 presents an overview of the number of Dutch and Frisian children who did the individual tests, split up by language background (*L1*), grade level (5-8) and language environment (A to C). As can be read from the table, the linguistic data gathered among 208 Dutch children and 202 Frisian children have been processed.

Table 3.2: Number of Dutch and Frisian children, per language environment and age level

L1	grade	A	B	C	N total
Dutch	5	32	33	43	108
Dutch	8	29	30	41	100
Frisian	5	22	32	46	100
Frisian	8	27	31	44	102
N total		110	126	174	410

A randomly selected group of eldest Frisian children (n=21) from category B and C has been re-tested as far as verb-raising and diminutive formation is concerned[13]. Re-testing took place in December 1994, so the time interval amounted to 4.5 years.

Frisian parents

To examine possible intergenerational differences in the knowledge of Frisian, a group of Frisian parents was randomly selected from all Frisian children taking part. Thus, two successive generations of Frisian speakers participated in the study: Frisian primary school children and some of their parents.

First, of all Frisian children every 10th child was chosen till a number of 35 was reached. Beforehand, this was considered a workable number. If a Frisian child selected had both a father and mother (this was checked by information from the schools) and both parents agreed to (and could) participate in the study, the father and mother were tested. In total 26 Frisian fathers and 26 Frisian mothers were recruited, and these participated in the study.

The parents were tested at home. They were approached in September/October 1992. An advantage of the fact that the parents were tested much later than the children is that their performance could not be influenced by reports of their children's experiences, or the other way round.

Dutch parents

An inquiry form was finally given to Dutch children's parents in order to tap their language attitudes and to examine their actual motivational support. No less than 168 (out of 208) parents (couples) returned, so the response percentage (81%) was high[14].

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[13] Eldest Frisian children from categories B and C were selected as Frisian children in these relatively '+Frisian' environments might show the greatest longitudinal progress as far as verb-raising and diminutive formation is concerned.

[14] As the total number of 208 Dutch children includes a few siblings in grades five and eight, the reported respons percentage of 81% (168/208) is the minimal figure.

3.4 Research instruments

In this section, an account of the operational definition of the research variables will be given. The measurement of the linguistic variables is first specified in section 3.4.1. Next, section 3.4.2 reports on the way the socio-psychological variables have been assessed.

3.4.1 Linguistic variables

Different procedures have been applied to collect the linguistic data. The linguistic variables have been measured by indirect discrete-point tests (Oxford 1982:121-124). Three tests (on breaking, diminutive formation and lexical knowledge) were oral and individual, and two tests (on *je*-verb conjugation and verb-raising) consisted of written group tests. In the oral tasks, elicitation has been carried out mainly by means of pictures. Both paper and pencil tests consisted of structured exercises (Larsen-Freeman and Long 1991:27). A description of the tests is laid out below.

Breaking
An elicitation task was carried out to measure the occurrence of breaking. Elicitation was performed by means of pictures of eight concrete nouns (singular). The experimenters (Frisian-speaking students) were instructed to name the singular in Frisian and to ask for the Frisian plural and diminutive. In order to prevent monitoring the task was carried out in a high pace. Responses were marked as 'correct', 'incorrect' or 'undecidable'. All sessions were audio-taped. Afterwards, I listened to all recordings to check students' codings. It turned out that there was an intersubjective agreement with the vast majority of the experimenters' codings. In the very few cases of disagreement, I adhered to my own decision. Cases of definitely undecidable responses, which were sporadic, were ultimately considered incorrect.

The selection of nouns was adopted from Boelens (1987b). He applied two criteria. First, the concrete nouns had to be in daily use by primary school children. Second, each of the four main breakable diphthongs (*/ie/, /ea/, /oe/* and */oa/*) was included twice, each time before a different consonant. Eight nouns were given to respond:

noun singular	diminutive	plural
stien (stone)	*stientsje*	*stiennen*
hier (hair)	*hierke*	*hierren*
tean (toe)	*teantsje*	*teannen*
beam (tree)	*beamke*	*beammen*
stoel (chair)	*stuoltsje*	*stuollen*
foet (foot)	*fuotsje*	*fuotten*
doar (door)	*doarke*	*doarren*
doas (box)	*doaske*	*(doazen)*

A sum score was calculated for every child by adding up all possible realisations of breaking. The plural of *doas* (box) remains unbroken, so the maximum breaking score comes to fifteen (7×2+1). In addition, two distinct sub-scales were developed for the occurrence of breaking in diminutives and in plurals. These sub-scales were established by summing the items concerned (*stien* to *doar*). The maximum score on both sub-scales was seven.

Diminutive formation
Elicitation of diminutive formation took place through pictures of seventeen concrete nouns (singular)[15]. Of these, eleven had the */ke/* suffix, four */tsje/* and two had */je/* as suffix. The experimenters were instructed to name the singular in Frisian and to ask for the Frisian diminutive form. To minimise monitoring, the test was administered at a quick rate. Codings were handled as described for breaking. The maximum score amounted to seventeen.

Je-verb conjugation
The conjugation of *je*-verbs was tested by a written sentence completion task (see Appendix I). The test included thirteen items in multiple-choice format. On purpose, three items consisted of verbs that did not belong to the category of *je*-verbs. These served as distractors. The other (ten) items covered the full conjugation paradigm, except for second singular polite forms. These forms were not included as they are probably not commonly used by (young) children. After reliability testing, one particular item (no. 6) was deleted (see §4.4). Thus, the maximum score was nine.

Lexical knowledge
To assess productive Frisian vocabulary, an oral elicitation task was administered. A total of 34 items was elicitated by means of pictures or presenting Dutch equivalents[16]. As to the pictures, the experimenters were instructed to ask (in Frisian) 'What is this in Frisian?'. In the case of Dutch equivalents, the question (in Frisian) was 'What is the Frisian word for ...?'.

The lexical items had to be in daily use by Frisian primary school children, so they probably comprised core-vocabulary (cf. Appel and Muysken 1987:165). Established borrowings were not included in the elicitation task. As said before (§3.2.1), Frisian and Dutch share a common stock of words. It goes without saying that these cognates were not included.

The items were divided into 21 nouns, 7 verbs and 6 adjectives. The three categories were thematically grouped. Nouns included animals, parts of the body, food, utensil and diverse. Verbs were grouped according to activity, emotional expression and sensory perception. Adjectives included size, colour and neatness.

All items were summed to one scale score. The maximum score amounted to 34. The task was administered at a quick rate to discourage monitoring.

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[15] Some children (mistakenly) responded to the item *foto* (photo), see Table 4.11.

[16] The following concrete items were elicitated by means of pictures: bread, bucket, carrot, cheese, church, dog, handkerchief, hedgehog, horse, knee, money, mouth, onion, pear, potatoes, scissors, sun and tooth. The other items (see Table 4.22) were elicitated by means of Dutch equivalents.

The Frisian-Dutch dictionary (Zantema 1984) was applied as norm, although internal variants, which occurred occasionally, were also judged correct. The words had to be uttered in a phonologically correct way. Codings were handled as described for the variable of breaking.

Verb-raising
Measurement of syntactic variables is not without problems (cf. Gerritsen 1990, Milroy 1987:143-170). Syntactic variables under study often do not appear frequently in spontaneous discourse, and the validity of elicitation tasks may be questionable. Due to the large number of informants involved in the present study, it was decided to make use of a written sentence completion task (see Appendix II). The task included eight sentences of which the two final verbs (two infinitives or perfect participle and infinitive) were omitted and had to be filled in. Verb-raising may also be practised in subordinate clauses, but the test sentences comprised only main clauses. The sentences can be divided into four different categories:

(1) (finite) modal verb + infinitives both end in */e/*
(2) (finite) modal verb + infinitives end in */en/* and */e/*
(3) to have + perfect participle + infinitive */e/*
(4) to have/to be + perfect participle + infinitive */en/*

The two missing verbs had to be filled in and could be chosen from four alternatives given. We present an example of the third category:

helpe - moatte - moatten - helpen
Klaas hie syn lytse suske _____ _____ *(helpe moatten)*
Klaas had his little sister _____ _____ (help must)

The order of the four alternatives was such that for each item category one time the right order was given by the first two alternatives (as in the example above: helpe-moatte), while the other time the right order is given by the final two alternatives. Every possible combination of the four alternatives was coded. Children who completed all sentences in the standard order reached the maximum score of eight.

3.4.2 Socio-psychological variables

Language attitudes
Language attitude forms a hypothetical construct that cannot be directly assessed. Still, to investigate language attitudes one can use relatively direct or indirect measurement techniques (cf. Knops 1983). A common relatively direct measurement technique is the Likert scale, while the matched-guise technique implies a widely used indirect assessment procedure. The two measurement techniques have their own pros and cons, and therefore we used both kind of techniques complementarily.

The *Likert scale* applied consisted of ten questions in multiple-choice format (see Appendix III). The items dealt with Frisian television, the symbolic use of Frisian (on a sticker and as place-name), Frisian as school subject and medium of instruction, the use of Frisian in everyday discourse, feelings of ethnicity, and

an evaluation of Frisian in terms of its importance and 'beauty'. Three questions contained four answer categories, while the other items included five categories. To minimise a set response half of the items had the most positive answer category placed at the top, whilst the other ones had the most negative category at the top. The data have been recoded where needed so that a high score stands for a positive language attitude, while low scores signify unfavourable attitudes.

Characteristic for the *matched-guise* test is for subjects to evaluate fragments of spoken language. They believe they are judging the speaker, but actually the language (variety) is evaluated. The children listened in class to four audio-recorded samples of spoken language. Two male speakers each read the same text twice, in Dutch and in Frisian. The text dealt with a neutral theme, the weather. The four fragments were presented in two different sequences. On half of the schools the order was Frisian-Frisian-Dutch-Dutch (order 1), on the other half the sequence was Dutch-Dutch-Frisian-Frisian (order 2). The presentation was structured as follows:

	order 1	*order 2*
speaker	A B A B	A B A B
language	F F D D	D D F F

The evaluations of speaker B have been analysed only, as the primacy effect of speaker A could be too strong, specially for the younger children in grade five. The speakers were judged at fifteen bipolar five-point scales, that were mainly adopted from Kerkhoff (1988, Kerkhoff et al. 1988). Next to eleven evaluative adjectives related to personality (sociable, honest, bright, et cetera) an estimation of the speaker's profession was asked for, whereby the answer categories varied from garbage collector to doctor (see Appendix IV). Finally, three items referred to the social attractiveness of the speaker: Would you like to have this man as your *teacher/father/neighbour*?

Motivation

To gauge Dutch children's motivation for learning Frisian, several items of Gardners' Attitude and Motivation Test Battery *(AMTB)* were selected and adapted. This resulted in the Motivation and Self-confidence Test Battery (*MSTB*, see Appendix V). In relation to this, the questionnaire developed by Vousten et al. (1989) has been helpful. Motivation can be divided into instrumental and integrative orientations. Seven items (A1-A7) refer to *integrative* orientations, and three items (B1-B3) aim at *instrumental* orientations.

Perceived motivational support (of parents and of the second language group)

Dutch children can be motivationally supported by their parents and by the second language group. Of interest are the learner's perceptions of that motivational support. Perceived *parental* motivational support was investigated by means of five *MSTB* items (see Appendix V: C1-C5). Perceived support of the *second language group* was operationally defined by six *MSTB* items (D1-D6). These

relate to perceived motivational support of *peers* (D1, D3 and D4) and of the (broader) *second language group* (D2, D5 and D6).

Self-confidence
To assess Dutch children's self-confidence in Frisian, five *AMTB* items were selected and adapted (see Appendix V: E1-E5). These items cover different aspects relative to the extent to which Dutch children report willingness to speak Frisian as second language.

Parental motivational support
Gardner (1985:110) mentions two different ways in which parents can motivate their children to learn a second language. They can play active and passive roles (see §2.2.2). Dutch children's parents responded to a questionnaire in which both roles were inquired about (see Appendix VI). The questionnaire incorporated ten Likert-type items assessing attitudes to Frisian (nos. 1-10). Of these, five were nearly identical to those in the children's attitude questionnaire, but their wording was adapted to adults (nos. 1, 4, 5, 9 and 10).

Besides the attitudinal items, the questionnaire for Dutch parents included three items directed at active motivational support. These items dealt with supportive behaviour: (*a*) talking with children about marked Frisian words or expressions (no. 11), (*b*) correcting children's errors in spoken Frisian (no. 12), and (*c*) buying Frisian children's books (no. 13). Lastly, the parental questionnaire included three items about Dutch parents' appreciation of oral Frisian language skills among their children (nos. 14-16) and a question about parents' own oral and written command of Frisian (no. 17).

3.5 Administration of tests and questionnaires

The data on the school children were collected in May 1990. The individual (oral) language tests, the matched-guise task and the Motivation and Self-confidence Test Battery were administered by some 60 third and fourth year students of two teacher training colleges in Friesland (*De Him* and *Mariënburg*). The linguistic background of the experimenters was taken into account in that two students visited one school, at least one student having Frisian as mother tongue. A Frisian student administered the individual language tests in Frisian and the other (*L1* Dutch or also Frisian) administered the matched-guise test in Dutch. Furthermore, the students took care of the administration of the Motivation and Self-confidence Test Battery. The students were instructed beforehand during an afternoon session. They also received a test-manual containing general guidelines and specific instructions for each test.

The students distributed the inquiry form on language attitudes and motivational support of Dutch parents, with an accompanying letter, to the Dutch children, who in turn handed them to their parents. The Dutch parents could fill in the form at home, and could send in the form to the author's working address. In principle, they were asked to fill in the questionnaire in mutual consultation. However, in case of disagreement the parents were advised to tick two different answer categories. Many of them did so.

The written language tests and the language attitude questionnaire were administered by class teachers as part of regular language lessons. The teachers

also got a test-manual, which included brief instructions on both group language tests and on the questionnaire on language attitudes.

The Frisian parents taking part in the study were visited at home by a senior student of Frisian and by the present author. This happened in September/October 1992. We followed the same procedures employed by the students and teachers. The parents were explicitly asked to respond to the language tasks in line with customary practice.

Chapter 4: Linguistic data

4.0 Introduction

In this chapter an analysis is made of the linguistic data collected. The chapter addresses research questions on the acquisition of Frisian as first and second language. More precisely stated, the next main research questions are dealt with (see §3.1):

a. What is Frisian and Dutch children's knowledge of Frisian?
b. How does their knowledge of Frisian relate to the children's age, gender and language environment?
c. Does Frisian children's knowledge of their first language differ from Frisian parents' knowledge of Frisian?

With respect to the first research question (*a*), it should be understood that relatively much attention is directed to Frisian children's achievements in their first language. Differences from standard Frisian are examined in detail as they will be interpreted in light of changes occurring to the language. Where possible the results obtained among Frisian children are compared with findings from previous Frisian research or with data about standard Dutch or Dutch dialects. The linguistic achievements of Dutch children are taken into consideration as well. They are set alongside those of their Frisian schoolmates.

Of particular interest is the relationship between first and second language acquisition and the factor called language environment (question *b*). This factor may differently influence the acquisition of Frisian as first or second language. There are reasons to believe that a strongly Dutch language environment may negatively influence the acquisition of Frisian as first language, while a strongly Frisian environment may be additively connected to the acquisition of Frisian as second language (see §3.2.3).

Another important point concerns the comparison between the knowledge of Frisian among Frisian children and parents (question *c*). Through this intergenerational comparison, an attempt is made to chart language change in present-day Frisian.

The chapter is organised as follows. Before analysing the language material gathered, a brief account of the language norm chosen as point of reference is in order (§4.1). The sections following hereupon successively include analyses of linguistic data in the realms of phonology (§4.2), morphology (§§ 4.3 and 4.4), lexicon (§4.5) and syntax (§4.6). Having presented the results for each distinct linguistic variable, attention is shifted to interrelations between the linguistic variables and to an index of knowledge of Frisian that is based on them (§4.7). Next, the focus is on intergenerational differences in the knowledge of Frisian as first language (§4.8). At this stage, the achievements of Frisian children will be set off against those of a group of Frisian parents. The penultimate section then addresses the link between the index of knowledge of Frisian and the oral use of Frisian by a number of Dutch children selected (§4.9). The last section (§4.10) briefly recapitulates the findings, and some conclusions are formulated in this part.

4.1 Language norm

Like many other minority languages which have massive contact with a dominant language, Frisian is continually and perhaps rapidly changing. There is a permanent linguistic pressure from Dutch, the dominant language. In such a case, it is very hard or even impossible to establish a clear *communicative norm,* that is a fixed reflexion of actual speech. Such a norm is doubtful as the variability of forms is large and changing over time (cf. Haugen 1977). A related point is the fact that the Frisian language community does not include a firm nucleus of monolinguals that could act as source for a clear cut communicative norm.

When a plain communicative norm is absent a useful alternative is to apply a *rhetorical norm.* This consists of a more or less abstract and idealised norm. A rhetorical norm is codified by grammars and dictionaries, but it is spoken by virtually no one (Haugen 1977:91). In the present study we have applied a rhetorical norm, using the latest grammar (Tiersma 1985) and dictionary (Zantema 1984) as points of reference.

Application of this rhetorical norm is not unrealistic, as it appears that the Frisian adults (parents) participating in our study generally perform in line with that norm. By and large, they produce many standard forms. This can be derived from the next table, which gives an impression of Frisian adults' performance on the five linguistic variables which are being used in our study.

Table 4.1: Frisian parents' mean correct scores on the tests measuring the linguistic variables

	# items	mean obtained	mean transformed[17]
breaking	15	13.64	9.09
diminutive formation	17	16.25	9.56
je-verb conjugation	9[18]	8.29	9.21
lexical knowledge	34	33.48	9.85
verb-raising	8	7.61	9.51

From the means presented above it can be derived that the Frisian parent group achieves close to the norm that has been drawn up. That goes for each linguistic variable under research. The value of the transformed means ranges from 9.09 (breaking) to 9.85 (lexical knowledge). These figures warrant the conclusion that the rhetorical norm employed is a meaningful point of reference. Still, we have to keep in mind that such a norm is somewhat idealised. That can be gathered from the finding that five (out of 52) Frisian parents gain a maximum score on

[17] To enhance comparison between the language tests the means obtained have been transformed to positions on scales ranging from 0 to 10.

[18] One item (*tekenje*) is not included here, because it behaved in a deviant way.

every language test, so 10% of the Frisian adults tested performs fully according to the standard.

4.2 Breaking

This section concentrates on the occurrence of breaking among the group of Frisian children, but the analyses will also deal with Dutch children's performance. Our inquiry of breaking among Frisian children will be compared with earlier empirical research on breaking (Boelens 1987b, Boelens and Ytsma 1989a 1989b). These studies were conducted in the Eighties. They were carried out among school children living in the former municipalities of East and West-*Dongeradiel.* It was found that in this area 78% of the primary school children had Frisian as home language in 1983. This high proportion of Frisian-speaking children comes close to the most Frisian language environment distinguished in our study (C:75-90% Frisian-speaking school population). The prime aim of the previous studies on breaking was to investigate whether the rule of breaking is still acquired by Frisian children, whether it is disappearing due to language change, or possibly both. The most important outcomes of the *Dongeradielster* study will be discussed later on in this section.

First, we present Frisian and Dutch children's summed breaking scores in order to get a first impression of the occurrence of breaking. The following table gives the outcomes obtained. Note that the maximum score attainable was 15, as the plural of one of the eight items (*doazen*) is normally unbroken (see §3.4.1).

Table 4.2: Summed breaking scores of Frisian and Dutch children, in numbers (and %)

score	Frisian	(*n*=202)	Dutch	(*n*=208)
0	3	(1.5)	69	(33.2)
1	8	(4.0)	30	(14.4)
2	7	(3.5)	28	(13.5)
3	8	(4.0)	12	(5.8)
4	3	(1.5)	22	(10.6)
5	5	(2.5)	13	(6.3)
6	15	(7.4)	8	(3.8)
7	8	(4.0)	7	(3.4)
8	10	(5.0)	7	(3.4)
9	11	(5.4)	6	(2.9)
10	21	(10.4)	3	(1.4)
11	21	(10.4)	2	(1.0)
12	25	(12.4)	1	(0.5)
13	26	(12.9)	-	-
14	18	(8.9)	-	-
15	13	(6.4)	-	-
mean	9.57		2.63	
sd	4.06		2.90	

Importantly, the figures presented make clear that few Frisian children (1.5%) fail to break any item. Obviously, the breaking rule does not hold true for them. One Frisian child who totally left out breaking is even from grade eight. In our opinion, it is very unlikely that the non-breaking Frisian children will still pick up the rule. They may rather be regarded as forerunners of a process of phonological language change.

In contrast, there are several Frisian children (6.4%) who consistently break every item. On average, Frisian children break 9.57 items. The strikingly high standard deviation found among Frisian children (4.06 vs. 2.90 for Dutch children) clearly indicates that the spread of breaking scores is comparatively large. The standard deviations just mentioned imply a greater variation in first language acquisition than in second language acquisition, and that runs counter to commonly held beliefs about variability patterns in first and second language acquisition (cf. Wong-Fillmore 1991:61).

It shows up that relatively many Dutch children (1/3 part) do not apply any breaking. There is no single Dutch child who gained the maximum score of 15. The highest score obtained by a Dutch child is only 12. Such figures already warrant the conclusion that breaking is infrequently applied by Dutch children. Their low mean breaking score (2.63) underpins that conclusion.

Unsurprisingly, the means obtained by Frisian and Dutch children (9.57 vs. 2.63) prove that Frisian children apply breaking much more often. That was confirmed by a (one-way) analysis of variance ($F=399.03$, $df=1$, $p<.001$)[19].

The foregoing statistics dealt with the summed breaking scores of the children. These sum scores give a first impression of the occurrence of the phenomenon. In addition, we examine the scores at the individual items under consideration. Table 4.3 contains this more specific information. The occurrence of breaking in diminutives and plurals is presented separately.

Above all, inspection of the figures reveals large differences between the eight items, especially among Frisian children. Among them, we observe the largest divergence between the frequency of breaking at the plural of the items *foet* (87%) and *hier* (37%). This yields a difference of no less than 50 percent. Moreover, it turns out that Frisian children realise the diminutive and plural of one item (*hier*) more often unbroken than broken. We note that this resembles the outcomes on breaking among the Frisian parents as *hier* was the only item where Frisian adults performed low. The plural of this item was broken by 67% of them, but the diminutive was broken by no more than 36% of the Frisian parents.

It is not the case that two items with the same diphthong (*/ie/, /ea/, /oe/* or */oa/*) always yield similar results. A fine example is the difference among Frisian children between the breaking frequency at the diminutives of the items *beam* (71%) and *tean* (56%). Perhaps word frequency plays a role in this respect. As breaking should be learnt by lexicalisation (see §3.2.1), it is conceivable that highly frequent words are broken more often than less frequent ones.

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[19] Note that the two groups showed no homogeneous variances (Levene stat.=24.72, $p<.001$).

Table 4.3: Breaking scores per item, for Frisian and Dutch children, in percentages

	Frisian (*n*=202)		Dutch (*n*=208)	
items	% breaking	*it*-cor[20]	% breaking	*it*-cor
stien dim	75.7	.56	16.8	.47
stien plur	82.7	.59	26.9	.64
beam dim	70.8	.59	13.5	.47
beam plur	69.3	.62	20.7	.59
foet dim	62.4	.54	10.1	.36
foet plur	86.6	.46	31.3	.43
stoel dim	60.4	.49	15.9	.36
stoel plur	74.8	.55	25.5	.46
doar dim	56.4	.52	16.8	.31
doar plur	57.9	.56	27.9	.45
tean dim	56.4	.51	8.7	.37
tean plur	66.8	.54	20.2	.50
hier dim	27.7	.36	4.8	.03
hier plur	37.1	.36	9.1	.31
doas dim	72.3	.49	13.9	.40
doas plur	(5.0)	.--	(14.4)	.--
		alpha .87		*alpha* .81

Worth mentioning is the finding that the normally *un*broken plural of the item *doas* is sometimes broken by Frisian and Dutch children. This happens among ten Frisian children (5%) and thirty Dutch children (14%). These forty children apparently overgeneralise the rule. Yet, they do not break every 'breakable' item. This can be seen from the mean breaking score of the Frisian and Dutch children concerned, which amounted to 9.20 and 2.63 respectively.

To find out whether frequency of breaking among Frisian and Dutch children shows resemblance, we correlated the breaking percentages listed in Table 4.3. The correlation arrived at proved significant (r=.72, p<.01) and that indicates that frequency patterns of first and second language acquisition are associated.

On the basis of the divergent breaking percentages for diminutives and plurals one is inclined to assume that breaking is more frequent for plurals than for diminutives. Previous research (Boelens and Ytsma 1989a:106-107) also showed differences as regards frequency of breaking in plurals and diminutives. Therefore, we checked-up this possible disparity. The difference can be investigated by *t*-testing the means on the subscales for diminutives (*DIM*) and plurals (*PLUR*) that have been established. The maximum score of both subscales amounts to 7. As the component items were dichotomous, the *Kuder-Richardson* reliability coefficient (*KR20*) has been computed for each subscale (cf. Drenth 1975:216). This

[20] It-cor is short for the corrected *i*tem-*t*otal *cor*relation. This is the correlation between each individual item and the scale composed of the other items.

was done for all children, and for Frisian and Dutch children separately. The results proved not unsatisfactory. *KR20* of the *DIM* scale among all children was .84, and among Frisian and Dutch children apart, it amounted to .77 and .54 respectively. The corresponding figures for the *PLUR* scale were .85, .78 and .75.

The table below gives the results of the three *t*-tests performed to check the difference of breaking in plurals and diminutives. These tests were carried out for all children, and for the distinct groups of Frisian and Dutch children as well.

Table 4.4: T-tests on breaking scores for diminutives and plurals

	DIM	*sd*	PLUR	*sd*	*t*	sig
all (*n*=410)	2.46	2.36	3.16	2.49	-9.26	<.001
Frisian (*n*=202)	4.10	2.13	4.75	2.03	-5.63	<.001
Dutch (*n*=208)	0.87	1.18	1.62	1.84	-7.62	<.001

The *t*-tests plainly show that among the total group of children, and also among Frisian and Dutch children apart, breaking is indeed consistently used more often in plurals than in diminutives.

There was even one Dutch child who applied no breaking at all in the diminutives and correctly broke all plurals. However, on the whole there was a strong positive relation between frequency of breaking in diminutives and plurals. Pearson's *r* between both variables for all children, and for Frisian and Dutch children separately, came to .80, .69 and .64 respectively ($p<.001$).

To further probe the difference between breaking in plurals and diminutives, we looked at the four response patterns in which breaking for diminutives and plurals can be realised in principle. Breaking can be used in both instances (*dimin+/plural+*), in none of them (*dimin-/plural-*), or in one out of two (*dimin+ /plural-* or *dimin-/plural+*). A rough inspection of the data suggests that if breaking is realised in one of both incongruous instances, the last mentioned possibility (dimin-/plural+) is observed far more often. To verify this assumption among Frisian children, a frequency count of the four combinations is presented in Table 4.5.

The figures in Table 4.5 do convincingly lend support to the forementioned assumption. It shows that the combination 'dimin+/plural-' occurs only 92 times, whilst the reverse pattern is noted over twice as often (*n*=224). Remarkably, the constellation in which, in incongruous cases, a broken diminutive co-occurs less frequently with an unbroken plural than the other way round, is very clear as to the item *foet* (foot).

This neatly confirms Tiersma's notion of *local markedness*, which says that for words where the referent usually occurs in pairs (like in 'feet') or groups, the plural is unmarked and has a higher frequency (cf. Tiersma 1982, 1993).

Table 4.5: Frequency of response patterns for Frisian children, in numbers

items	dimin + plural +	dimin - plural -	dimin + plural -	dimin - plural +
stien	145	27	8	22
foet	123	24	***3***	***52***
beam	123	42	***20***	***17***
stoel	115	44	7	36
tean	96	49	18	39
doar	91	62	***23***	***26***
hier	43	114	13	32
total	736	362	92	224

In contrast, however, the same constellation does not apply to the response pattern of the items *beam* (tree) and *doar* (door). Note that these words both select the typical Frisian */ke/* diminutive suffix in standard Frisian as the noun singular ends in */m/* and */r/* (see §3.2.1). Conceivably this backs up the incidence of breaking in the diminutive. The item *hier*, which also selects */ke/*, forms an exception on this, but that is understandable as Frisian children produce the diminutive and plural of this word more often unbroken than broken (see Table 4.3). So *hier* is exceptional in any case.

Breaking linked to the independent variables

In the foregoing, we examined the occurrence of breaking among Frisian and Dutch children. One of the research questions posed was whether knowledge of Frisian as first and second language relates to the children's age, gender and language environment (see §3.1). In the course of this chapter we repeatedly relate the distinct dependent (language) variables to this fixed set of independent variables.

We decided to do so for Frisian and Dutch children separately. There are two reasons for analysing Frisian as first and second language respectively. The first reason concerns content: this way the analyses of variance treat Frisian as first and second language separately. The other argument relates to statistical considerations. The standard deviations on the linguistic variables sometimes vary too widely among Frisian and Dutch children to include first language as an independent variable in the analyses (of variance) without analytic problems. Note for instance the varied standard deviations listed in Table 4.2 (4.06 vs. 2.90).

The dependent variable of breaking was constructed by condensing all 15 items concerned (7×2+1) into one sum scale. The reliability of the scale turned out to be good. The *Kuder-Richardson* reliability coefficient (*KR20*) calculated for all children and for Frisian and Dutch children separately, amounted to .92, .87 and .81.

ANOVA for Frisian children

In order to investigate in detail any possible relationships between breaking among *Frisian* children and the three just mentioned independent variables, we present the outcomes of an analysis of variance (*ANOVA*) carried out with breaking as dependent variable.

Table 4.6: ANOVA (regression approach) on breaking for Frisian children

factor	SS	df	F	p
age (AG)	227.50	1	14.85	<.001
gender (GE)	65.36	1	4.27	<.05
lang. env. (LE)	31.47	2	1.03	n.s.
AG × GE	4.13	1	.27	n.s.
AG × LE	13.22	2	.43	n.s.
GE × LE	15.72	2	.51	n.s.
AG × GE × LE	1.71	2	.06	n.s.
mean (5 - 8)	8.39	10.74		
mean (♂ - ♀)	8.39	10.17		
mean (A - B - C)	9.14	9.83	9.63	

In Table 4.6 we find statistically significant main effects for the variables age and gender, whereas none of the interaction effects is significant. It appears that older Frisian children and girls break more frequently than younger children and boys. The mean breaking score for Frisian children in grade eight turns out to be 10.74, while the mean obtained by the younger children (grade 5) was 8.39. The finding that Frisian children still show a development in the application of the breaking rule during the second half of primary school might relate to the fact that breaking is not a transparent phenomenon (see §3.2.1). Moreover, the rule is functionally redundant as the formation of the diminutive and plural is already signalled by the suffixes concerned. This may also retard full mastery of breaking.

The difference between the breaking scores of Frisian girls and boys is substantial. Girls' mean breaking score amounted to 10.17, whereas the mean of boys was 8.39. Such findings are in line with the notion that in first language acquisition girls often enjoy a rate advantage (cf. Larsen-Freeman and Long 1991:204). Perhaps unexpectedly, there was no significant main effect for the variable of language environment. The means in school category A, B and C were 9.14, 9.83 and 9.63 respectively. So Frisian children's breaking appears to be unrelated to the Frisian/Dutchness of their everyday environment.

ANOVA for Dutch children

The preceding analysis centred on the performance of Frisian children. The achievements of Dutch children will now be dealt with. Again, we link children's breaking scores to their age, gender and language environment. The following table lists the outcomes of the analysis of variance that has been carried out.

Table 4.7: ANOVA (regression approach) on breaking for Dutch children

factor	SS	df	F	p
age (AG)	262.91	1	38.42	<.001
gender (GE)	54.10	1	7.91	<.01
lang. env. (LE)	32.77	2	2.39	<.10
AG × GE	28.43	1	4.15	<.05
AG × LE	3.47	2	.25	n.s.
GE × LE	14.61	2	1.07	n.s.
AG × GE × LE	15.06	2	1.10	n.s.
mean (5 - 8)	1.52	3.82		
mean (♂ - ♀)	2.13	3.13		
mean (A - B - C)	2.11	2.57	3.04	

Table 4.7 firstly reveals significant main effects of the variables age and gender, as was also the case among Frisian children. Again, we observe more breaking among older children and girls than among younger children and boys. The mean breaking score for the Dutch children in grade eight turned out to be 3.82, while the average score of the younger children in grade five was only 1.52. The difference between Dutch girls and boys turned out to be a little smaller. Girls gain a breaking score of 3.13 on average, whereas the mean of boys amounted to 2.13. The gender difference is specially due to the relative high breaking scores of the oldest Dutch girls. This can be seen from Figure 4.1, which illustrates the interaction effect between the variables age and gender.

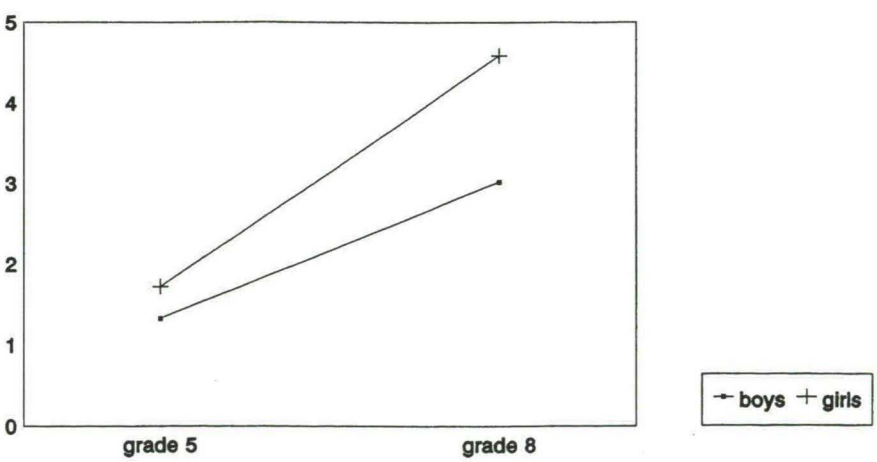

Figure 4.1: Dutch children's mean scores on breaking, by gender and age[21]

[21] ♂/5=1.33, ♂/8=3.02, ♀/5=1.72, ♀/8=4.59

Simple effect tests were carried out to verify the differences between the means of Dutch boys and girls per age level, and between the average scores of younger and older Dutch children by sex. These tests reveal that Dutch boys and girls both achieve better in the highest grade than in the fifth grade. The values of F are 11.61 ($p<.01$) and 30.91 ($p<.001$) respectively. The gender differences per age level are less consistent, as the mean breaking scores of boys and girls do differ statistically significantly from one another in the highest grade (F=9.53, $p<.01$), but not in grade five (F=.73). Hence, the simple effect tests warrant the conclusion that Dutch girls show more cross-sectional progress than Dutch boys.

Contrary to Frisian children's results, the analysis of variance for Dutch children displayed a tendency to apply breaking slightly more frequent in stronger Frisian environments (see Table 4.7). The mean scores in school category A, B and C were 2.11, 2.57 and 3.04 respectively. Comparing this with the results of the other linguistic variables investigated, we note that breaking is the sole linguistic variable studied where we do not find a statistically significant effect for the variable of language environment among Dutch children. In our view, this underlines the 'unlearnability' of breaking as a rule-governed phenomenon.

Finally, it is noteworthy that some Dutch children exhibited a systematic error in various cases. They characteristically overgeneralised the rule of breaking. This was, for example, observed among the items *beam* (tree), *tean* (toe) and *stien* (stone), where the noun singular was spontaneously broken incorrectly. *Bjem, tjen* and *stjin* was heard in these instances. A similar type of error has been observed among a Frisian-speaking pre-schooler (Ytsma 1990b:18). Likewise, overgeneralisation was noticed (see Table 4.3) with the item *doas* (box), where breaking normally occurs in the diminutive, but not in the plural (see §3.4.1). Several Dutch children, however, wrongly broke the plural. In our judgement, the occurrence of overgeneralisation among the second language learning children is to be interpreted as a typical developmental phenomenon.

A comparison with Boelens' data

As we mentioned in the introduction to this section, we will relate our results on breaking among Frisian children to earlier empirical research carried out by Boelens in the *Dongeradielen*. Compared to Boelens' local data on breaking among Frisian primary school children living in the *Dongeradielen* (Boelens 1987b, Boelens and Ytsma 1989a 1989b), we notice striking similarities, but also important differences.

To begin with, the age effect which we observed and the absence of an effect for the variable language environment is in agreement with Boelens' findings. Regarding age differences, Boelens (1987b:102) noted cross-sectionally rising breaking percentages from 44, 63, 73, 77, 82, 83, 86 to 89%, starting with grade one (Kindergarten) and going up to grade eight. The age effect received confirmation from longitudinal research data (Boelens and Ytsma 1989a:106, 1989b:13).

As regards an effect for the variable language environment, Boelens was inclined to ascribe influence to the presence of many Dutch-speaking schoolmates in some of the *Dongeradielster* schools. However, his data revealed that the breaking scores of Frisian-speaking pupils attending primary schools with a rela-

tively low percentage of Frisian pupils were not lower than the breaking scores obtained in the other primary schools (Boelens 1987b:102). Our data corroborate these results, as we did not find a statistically significant main effect for the variable of language environment.

Unlike Boelens' earlier findings, we observed a gender effect, whereby girls were closer to the standard. In the *Dongeradielster* primary schools, Boelens did not detect a gender difference. He reported that all boys from Frisian-speaking homes together (n=331) had an average breaking score of 11.10, and all Frisian girls (n=276) of 11.15 (Boelens 1987b:100). In connection with the Frisian primary school children, Boelens denoted gender as the least influential variable on breaking. Moreover, meaningful gender differences could not be demonstrated among a subject group of secondary school pupils (Boelens and Ytsma 1989b:14). An explanation for the discrepancy between Boelens' data and ours on the relation between gender and breaking may be sought in the low(er) variance in the *Dongeradielster* breaking data.

The most important discrepancy between our findings and those of the *Dongeradielster* children is the extent to which breaking was applied. It appeared that the *Dongeradielster* primary school children in grade five and eight applied breaking far more often than our sample of Frisian children from all over Friesland in these grades did. The dissimilarity can easily be deduced from the percentages of breaking per item, which are given in the table below.

Table 4.8: Percentage of breaking per item, for Dongeradielster Frisian children and for Frisian children from the present study, per grade level

items	Boelens (5) (n=71)	Boelens (8) (n=82)	Ytsma (5) (n=100)	Ytsma (8) (n=102)
foet	97.9	99.4	50.0	71.6
tean	95.1	98.8	44.0	51.0
stien	97.9	99.4	65.0	78.4
stoel	95.1	97.6	45.0	68.6
beam	98.6	98.8	50.0	71.6
doar	79.6	92.1	35.0	54.9
hier	44.4	72.0	15.0	27.5

(Items were considered broken if breaking was applied in both diminutive and plural. Source data the *Dongeradielen*: Boelens 1987b:101)

The table above persuasively illustrates the large disparity between the occurrence of breaking in the two studies. Whereas in the *Dongeradielen* study breaking was applied over 90% for six out of seven items in grade eight, the corresponding percentages of the present study range between 51 and 78%. Most dramatic is the contrast between the outcomes of both research projects as to the item *hier* (hair). In both studies, breaking was much less frequently observed for this particular item than for all other items. However, whereas almost three-quarters of the oldest Frisian children (grade 8) in the *Dongeradielen* broke the item *hier*, the figure dropped to about 1/4 in the present study. In short, our findings on the breaking phenomenon are not in support of Boelens' conclusion (based on the first five items in Table 4.8) that breaking is fully realised by Frisian children

between ages 6 and 12 (Boelens 1987b:103). The lowest score obtained by *Dongeradielster* Frisian children from grade five and eight came to six (out of fifteen) in 4% of the cases[22], while our data revealed that a few Frisian children completely ignored the rule of breaking. On the whole, and in contrast to Boelens' conclusion, we deduce from our data that at the end of primary school, the rule of breaking is only incompletely mastered by many Frisian children.

How can this difference between the two data sets be explained? Most probably, it can be ascribed to the specific linguistic make up of the *Dongeradielen*. In this respect, Boelens (1987b:95) calls the area at issue a 'linguistic and social unit'. Moreover, it is known that in this particular area breaking is typically applied to singular nouns as *buosse* (standard Frisian: *bûse*; English: pocket) and *buotter (bûter:* butter). Perhaps such typical cases of breaking back up the occurrence of 'regular' breaking in diminutives and plurals. This explanation is confirmed if we compare our findings on the diminutives *stuoltsje* (little chair) and *doaske* (small box) to those obtained in a study by Van der Meer (1985). His adult informants (n=41, age range 21 to 76) broke these items to the extent of 91 and 98% respectively (Van der Meer 1985:270-271). The corresponding figures for our primary school children were only 60 and 72%. Remarkably, the item *stuoltsje* was broken in 1983 by 98% of Boelens' *Dongeradielster* children in grade five and eight. The other item (*doaske*) was not included in his study. Note that the *Dongeradielster* children in grade five and eight broke the item *stuoltsje* even more often (7%) than the Frisian adult informants of Van der Meer did. This lends support to our view of the *Dongeradielen* being a specific, non-representative area.

Second, a minor part of the contrast between both data sets may possibly be diachronically interpreted, for Boelens' first inquiry dates from 1983, and Van der Meer (1985:260) concluded that with his subject group younger informants tend to use broken forms less often than older informants. On the other hand, this interpretation is less promising. The time interval between the two data sets is probably too small. Moreover, Boelens and Ytsma (1989a:110) found only minimal differences in frequency of breaking between two different cohorts (1983 and 1988) of primary school children. They concluded that breaking underwent no general process of language change within this (admittedly limited) period of time. In the section on intergenerational differences (§4.8) we return to the issue of language change.

Summary and concluding remarks

The data presented lead us to conclude that at the end of elementary school, Frisian children generally have not fully mastered the rule of breaking in diminutives and plurals. We find a good deal of flux in their breaking scores. The above conclusion is at variance with earlier findings of a local inquiry conducted in the *Dongeradielen* (Boelens 1987b). Strikingly, a small number of Frisian children in our study even fails to apply any breaking. It seems that the rule does not hold true for them. All this suggests that breaking indicates a process of phonological language change. The change probably relates to the opacity and functional redundancy of the rule, which causes breaking to be a weak point in

[22] This figure has been calculated on Boelens' 1983 data set.

the language system. As breaking is a highly distinct feature of Frisian phonology, it concerns an interesting change. In a way, the change forms an example of phonological *simplification*, resulting in increased linguistic regularity. As such, it forms an *intralinguistic* change. In the section about intergenerational differences (§4.8) we shall further discuss the proposition that breaking marks language change.

It was proved that Frisian primary school children show a notable increase in the application of the rule of breaking as they grow older. This means an extremely late linguistic development, which can be explained by the non-transparency and redundancy of the phenomenon. In view of the relation between the learnability of phonological rules and their regularity, it has been stated that opaque rules may be learnt later than transparent ones (De Gussem 1981:19). Breaking has no functional load and that is why Frisian children who leave out the rule can do so without the risk of being misunderstood.

Remarkably, it was shown that the factor of language environment had no impact on the occurrence of breaking, neither among Frisian children nor among Dutch children. Thus, breaking is the single linguistic variable which does not clearly rise among Dutch children as they find themselves in more prominent Frisian environments. Presumably, this emphasises once more the 'unlearnability' of breaking as a rule-governed variable. In addition, it appeared that girls, Frisian and Dutch as well, perform slightly better than boys. The data also demonstrated that, on the whole, breaking is infrequently applied by Dutch children. For one out of three Dutch children, the rule does not exist at all. This is hardly surprising if one bears in mind that the rule is entirely unknown in their first language. Nonetheless, older Dutch children perform less poorly than younger ones.

Our data also revealed that breaking is consistently used more often in plurals than in diminutives. This finding confirms previous outcomes of the *Dongeradielster* study (Boelens and Ytsma 1989a:106-107). Such results fit in the general acquisition sequence proposed by Schaerlaekens and Gillis (1987:136), who refer to plural formation as one of the first acquired inflexional systems in various languages. Finally, Tiersma's (1982, 1993) notion of *local markedness* was empirically corroborated by our findings (see Table 4.5).

4.3 Diminutive formation

Contrary to the phenomenon of breaking, there have been no research data on Frisian children's acquisition of Frisian diminutive formation till now. The only empirical study on the acquisition of the Frisian diminutive system was carried out among non-Frisian children (Boelens 1987a). It was demonstrated in that study that Dutch children apply Frisian diminutive forms with great difficulty.

Similarly, there have not been many studies on the acquisition of Dutch diminutive formation among Dutch children. Schaerlaekens and Gillis (1987) locate the acquisition of Dutch diminutive formation by Dutch children between the ages of 2.5 and 5. Broadly speaking, results from a study by Extra (1978) underline their position. Moreover, Moenaert (1983:93) found that about a quarter of Flemish pre-schoolers still made a considerable number of errors in the use of regular diminutive suffixes. Furthermore, an experimental study by Den Os and Harder (1987) put forward that the rules for the formation of diminutives in Dutch were learnt later than those for plurals. The rules for diminutive formation were learnt at the age of eight or nine. Finally, Snow, Smith and Hoefnagel-

Höhle (1980) demonstrated that twelve-year-old Dutch children had completely espoused the rules of Dutch diminutive formation, while seven-year-old Dutch children had not yet done so.

In short, the studies into Dutch children's acquisition of the Dutch diminutive paradigm suggest that the system is fully mastered at the end of primary school, that is, at the age of twelve.

As distinct from the number of studies into children's acquisition of the Dutch diminutive system, there have been quite a few dialect studies in which the formation of diminutives is dealt with in terms of dialectical loss. The first national dialect-geographical study into the spread of certain diminutive suffixes in the Dutch language area was conducted in the Thirties by Pée (1936, 1938). Pée came to the conclusion that there was a general process of dialectical replacement of */ke/* by */tje/* (Pée 1936:59). There are several more recent dialect studies which likewise pay attention to the formation of diminutives. Among these are the studies of De Bont (1962) concerning the *Kempenland* dialect, Hoppenbrouwers (1978) on the dialect of *Westerhoven*, Reker (1983) and Wierenga (1986) on the *Groninger* dialect, Van Bree (1985) on the dialect of *Twente*, Münstermann and Hagen (1986) on the dialect of the city of *Maastricht* and Van Hout (1989) on the urban dialect of *Nijmegen*. The results from these studies are difficult to compare. Nevertheless, the results obtained in the Dutch dialect studies seem inconclusive. In the study on the *Maastricht* vernacular it was concluded, for instance, that the formation of dialect diminutives was quite resistant (Münstermann and Hagen 1986:83). Contrary to these findings, a massive dialectical loss of the traditional */ke/* suffix (or a variant of it) was found in the urban dialect of *Nijmegen* (Van Hout 1989:223-224).

In contrast to the relatively large number of Dutch dialect studies, there has been little research into the 'loss' (or changes) of Frisian diminutive endings. In connection herewith, Feitsma's impression is that derivational endings in Frisian are relatively resistant (1971:12-13). The 'loss' of Frisian diminutive endings has been empirically studied by Breuker (1982) and by Koornstra (1987). Both investigations included highly non-representative and small groups of informants. Breuker concluded that */ke/* is generally being ousted by */tsje/* in linguistic contexts where Dutch has */tje/*.

Koornstra's study dealt, among others things, with diminutive formation among Frisian inhabitants of the village of *Aldehaske*. The subjects (n=35) were divided into three age groups: 14-21 *yrs* (12 subjects), 29-48 *yrs* (12 subjects) and 56-76 *yrs* (11 subjects). The study included 20 words, twelve ending in */r/* and eight in vowels. Koornstra found that the standard */ke/* suffix was applied in 85% of words ending in */r/* and in 63% of those ending in vowels (Koornstra 1987: 54). A re-analysis of Koornstra's data revealed a tendency for younger Frisians to apply less standard forms, but the differences between the generations distinguished were not statistically significant[23].

Opinions differ greatly as to the origin of the displacement of */ke/* by */tsje/*. Breuker ascribed this development to *external* Dutch influences, that is, to the

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[23] A one-way analysis of variance has been carried out, F=3.18, p<.10. Note that the number of respondents per age group was small.

language contact between Frisian and Dutch. In contrast, De Haan (1990) holds that the development can be interpreted basically in terms of an *internal* language change: the */tsje/* class enlarges at the cost of the */ke/* class. In association with this controversy, there has been a debate on the question whether or not bound inflectional endings can be borrowed (cf. Feitsma 1982). Referring to Weinreich, who wrote that "the transfer of morphemes which are as strongly bound as inflectional endings in many European languages seems to be extremely rare" (Weinreich 1963:31), Feitsma (1982) parries the position of Breuker (1982, 1984), claiming that borrowing of Dutch diminutive endings as such does not occur in Frisian. De Haan (1990:117) agrees with Feitsma. He speaks of rule-extension in Frisian.

The present study

The preceding section showed that there are considerable gaps in our knowledge about the acquisition and changes of Frisian diminutive formation. The current section (§4.2.1) further investigates the acquisition and changes of the Frisian diminutive rule system.

First of all, we discuss Frisian and Dutch children's achievements on the test designed to assess diminutive formation in Frisian. The diminutives were elicited by means of drawings (see §3.4.1). The spread of scores presented in Table 4.9 gives a first impression of the results. Remember that the maximum score attainable was 17.

Table 4.9: Scores on diminutive formation, for Frisian and Dutch children, in numbers (and %)

scores	Frisian	(*n*=202)	Dutch	(*n*=208)
0	-	-	2	(1.0)
1	-	-	10	(4.8)
2	-	-	7	(3.4)
3	-	-	5	(2.4)
4	-	-	5	(2.4)
5	-	-	15	(7.2)
6	-	-	15	(7.2)
7	-	-	15	(7.2)
8	2	(1.0)	14	(6.7)
9	3	(1.5)	20	(9.6)
10	10	(5.0)	23	(11.1)
11	8	(4.0)	15	(7.2)
12	17	(8.4)	23	(11.1)
13	21	(10.4)	20	(9.6)
14	29	(14.4)	10	(4.8)
15	48	(23.8)	4	(1.9)
16	37	(18.3)	4	(1.9)
17	27	(13.4)	1	(0.5)
mean	14.28		8.81	
sd	2.10		3.90	

From the table it can be read that a portion of Frisian children (13%) produce standard forms only (score 17). Their performance is fully in agreement with standard grammar. However, there are also two Frisian children who produce less than half of the potential cases in accordance with the rules of grammar. The mean score obtained by Frisian children on the diminutive formation tests comes to 14.28. All in all, we conclude from the figures in Table 4.9 that Frisian children generally achieve fairly well.

The mean score obtained by Dutch children (8.81) indicates that they apply Frisian diminutive forms with considerable difficulty. This confirms earlier research findings (Boelens 1987a). Not surprisingly, the means obtained by Frisian and Dutch children (14.28 vs. 8.81) evidences that Frisian children obtain much higher scores. This was statistically corroborated by a (one-way) analysis of variance ($F=309.12$, $df=1$, $p<.001$)[24].

Next we concentrate on those items where */ke/* may be ousted by */tsje/*. It concerns seven nouns ending in a vowel or diphthong, or in */r/* (see Table 4.11). The results on these particular items are listed in the following table.

Table 4.10: Scores on /ke/ items, for Frisian and Dutch children, in numbers (and %)

scores	Frisian	(n=202)	Dutch	(n=208)
0	9	(4.5)	47	(22.6)
1	7	(3.5)	20	(9.6)
2	9	(4.5)	26	(12.5)
3	15	(7.4)	24	(11.5)
4	27	(13.4)	39	(18.8)
5	49	(24.3)	24	(11.5)
6	48	(23.8)	21	(10.1)
7	38	(18.8)	7	(3.4)
mean	4.84		2.86	
sd	1.87		2.15	

The table reveals that a few Frisian children (4%) do not apply any standard diminutive formation to the seven 'risky' items under consideration (score 0). The traditional */ke/* suffix seems not to exist for them.

On the other side, the table also reveals that nearly one out of five Frisian children (19%) consistently applies standard suffixation to the same items (score 7). The remainder of Frisian children, that is about three-quarters (77%), use the traditional suffix every now and then.

Among the group of Dutch children we find a reversed pattern. Few if any (3%) constantly apply standard diminutive formation, and nearly a quarter (23%) never uses standard diminutive suffixes.

[24] Note that the two groups showed no homogeneous variances (Levene stat.=73.50, $p<.001$).

So far the analyses have dealt with summed scores on the diminutive test. In addition, we look at the scores per test item. The following table gives the results.

Table 4.11: Correct score per item, for Frisian and Dutch children, in percentages

		Frisian (*n*=202)		Dutch (*n*=208)	
items	suffix	% correct	*it*-cor	% correct	*it*-cor
blêd (leaf)	sje	99.0	.06	60.1	.37
doarp (village)	ke	98.0	.09	48.1	.47
boat (boat)	sje	97.5	.05	63.9	.27
glês (glass)	ke	97.5	.16	55.8	.50
blom (flower)	ke	97.0	.18	70.2	.50
fûgel (bird)	tsje	97.0	.04	68.3	.36
skroef (screw)	ke	96.5	.17	66.3	.58
each (eye)	je	92.6	-.03	78.8	.05
telefoan (telephone)	tsje	89.6	.05	54.3	.29
*skuor** (crack)	ke	88.1	.52	54.3	.49
*ear** (ear)	ke	84.7	.43	49.5	.51
knyptang (pincers)	kje	79.7	.14	29.3	.11
*do/(foto)** (pigeon)	ke	78.2	.38	51.0	.55
*stjoer** (wheel)	ke	77.2	.49	51.4	.55
*aai** (egg)	ke	64.9	.35	31.3	.37
*trui** (jumper)	ke	54.5	.34	30.3	.18
*spiker** (nail)	ke	36.1	.37	18.3	.34
alpha		.63		.80	
mean		84.0		51.8	

Table 4.11 clarifies once again that Frisian children generally respond fairly well, although the asterisked items where the Frisian suffix is */ke/* and the Dutch one is */tje/* display relatively lower correct scores. Note that the same items have the highest item-total correlations (*it*-cor).

The table shows large differences between the distinct items. Among Frisian children, practically half of the items (8 out of 17) were at least 90% 'correct'. Their average overall correct score is fairly high (84%). A striking result is found for the item *spiker* (nail). This particular noun elicits more non-standard than standard suffixes among Frisian children. This finding is in agreement with earlier results reported by Koornstra (1987). She noticed 40% standard forms with the same item among her local Frisian informants, whose age varied from 14 to 76 years. Besides, it should be noted that her informants produced 70% standard forms at the item *trui*, whilst our Frisian subject group only realised 54% standard suffixation at this item.

Interestingly, it appeared that the two items with the lowest correct scores (*trui* and *spiker*) among the Frisian children were exactly the sole items where the Frisian parents tested performed poorly. Over a half of them (54%) applied the

/ke/ suffix in *truike*, whilst *spikerke* was used by no more than 36% of the Frisian adults.

Worthy of mention is the case of some Frisian children who monitor their own responses and correct themselves. One Frisian child, for instance, responded to the item *aai* (egg) as follows: '*aitsje, nee... aike, ehh aike of aitsje, aike*' (aitsje, no... aike, ehh aike or aitsje, aike). Another child responded to the item *each* (eye) as follows: '*eachje, eachke mei ek*' (eachje, eachke is also allowed). A third example is reproduced in the following transcript: '*eartsje ... of earke*' (eartsje ... or earke). Most likely, these self-corrections betray linguistic insecurity among Frisian children.

Dutch children's knowledge of the Frisian diminutive system varies from 79% correct for the item *each* (eye), which has the */je/* suffix both in Frisian and in Dutch, to 18% for *spiker* (nail). Note that the latter item also got the lowest score among Frisian children. Dutch children's mean overall correct score was comparatively low (52%). Their most frequent error consisted of the over-generalised use of the typical */ke/* suffix. This confirms earlier research findings (Boelens 1987a:85).

To examine the relation between the correct percentages on the 17 items for Frisian and Dutch children, the correlation between the correct percentages of both groups of children has been calculated. The correlation proved highly significant (r=.84, p<.001). This positive association means that Dutch children's performance largely reflects the achievements of Frisian children. In other words, we can conclude again that first and second language acquisition show similar patterns.

Non-standard suffixation

Scrutinising non-standard forms ('errors') realised by Frisian children reveals the following. First of all, it appears that Dutch diminutive suffixes are seldom added to Frisian nouns by Frisian children. To be precise, this was only noted six times, that is, 1.7 per thousand[25]. This is in accordance with the conclusion of De Haan, who stated that the transition from the Frisian rule system to a superficially 'Dutchified' system cannot be described simply in terms of borrowing from Dutch (De Haan 1990:110).

Moreover, it turns out that the rules '*/ke/ appends to a stem ending in [m p f s]*' and '*/tsje/ is the suffix following [l t d]*' (Tiersma 1985:59) are generally well applied (see Table 4.11). Therefore, the items covering these instances are not included in the next table, which gives an overview of Frisian children's more systematic deviations from standard grammar.

The results listed in Table 4.12 underline Breuker's (1982:86) above-mentioned conclusion about the replacement of */ke/* by */tsje/* in contexts where Dutch has */tje/*. This applies, for instance, to the three items with the highest total number of non-standard suffixes (*spiker*, *trui* and *aai*). Noteworthy is the finding that the */tsje/* suffix is occasionally realised as */tsy/*. This form has been mentioned before as variant of the */tsje/* suffix (cf. Sipma 1966:41, Tiersma 1985:17).

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[25] This figure was calculated as follows: (6/(202*17)).

Table 4.12: Frisian children's systematic deviations from standard grammar, in numbers

items	total #	error type (and #)			
trui-ke	92	/tsje/	(86)	/tsy/	(1)
aai-ke	71	/tsje/	(62)	/tsy/	(3)
do-ke/foto-ke	44	/tsje/	(36)	/tsy/	(1)
spiker-ke	129	/tsje/	(117)	/tsy/	(9)
stjoer-ke	46	/tsje/	(40)	/tsy/	(3)
ear-ke	31	/tsje/	(28)	/tsy/	(1)
skuor-ke	24	/tsje/	(19)	/tsy/	(2)
knyptan(g)-kje	41	/etsje/	(10)	/tsje/	(4)
		/ke/	(15)	/eke/	(1)

The large difference between the number of errors for the items *spiker* (129) and *skuor* (24), which both should select the */ke/* suffix in Frisian (and */tje/* in Dutch), suggests that the phonetic context preceding */r/* or the syllable structure may play an important role. But perhaps word frequency is also influential.

Of special interest are the deviations from standard found with the item *knyptang*, which is also pronunciated as *knyptange* (+schwa). The data show two basic error types: adding the suffixes */(e)tsje/* and */(e)ke/*. The former type of error can be interpreted as an indication of external influence of Dutch.

Replacement of */ke/* by */tsje/*

Interestingly, Pée's research from the Thirties also contains some data on Frisian diminutive formation (Pée 1938:3-24, 63-69). Of special interest here are the nouns ending in */r/*. The noun *koer* (basket) received the */ke/* suffix in all cases. However, 50 Frisian informants (81%) appended the */ke/* suffix after *dochter* (daughter), whereas 12 (19%) used */tsje/* in this context. Apparently, the observed replacement of */ke/* by */tsje/* among the current generation of Frisian school children is by no means a recent process.

An important question is under what conditions */ke/* is being replaced by */tsje/*. First of all, the */tsje/* suffix is used precisely in those contexts where Dutch has */tje/* (Breuker 1982). This may point in the direction of Dutch influence. However, as said, De Haan (1990) explains the replacement by referring to internal system changes: the already existing Frisian */tsje/* class is enlarged at the cost of the */ke/* class and becomes [+ sonorant] and more homorganic.

In connection with the */ke/* <> */tsje/* replacement De Haan (1990) makes mention of the following changes over time:

traditional grammar:
/ke/ after vowels and after */r/*
transitional grammar:
/ke/ or */tsje/* after vowels and after */r/*
final grammar:
/tsje/ after vowels and after */r/*

What do our data signify in connection with such a change of grammar? It appears that the data neatly fit in the scheme of transitional grammar, for the seven asterisked nouns in Table 4.11 all select */ke/* or */tsje/*. The item *spiker* (nail) obtains by far the highest number of */tsje/* suffixes. Yet, even this noun still has the 'traditional' */ke/* in one third of the cases.

The congruence with transitional grammar means that traditional grammar is prescriptive rather than descriptive. The absence of a statistically significant intergenerational effect among Koornstra's data and also the fact that Pée (1938:3-24, 63-69) already noted signs of the */ke/* <> */tsje/* displacement more than half a century ago underscores this view. In our contention, the stage of 'final grammar' mentioned by De Haan (1990) is not to be expected within the foreseeable future. The finding, represented in Table 4.11, that Frisian children use the */ke/* suffix in so many cases with the items *skuor* (88%) and *ear* (85%) underpins our position. We should realise that instances of relatively stable variation do also occur (cf. Hinskens 1992:6). In this connection, Aitchison (1991:90) rightly stated that variation can exist without change.

Diminutive formation linked to the independent variables

Analogous to the analyses presented in the previous section on breaking, we now detail the results of the analyses of variance carried out on diminutive formation. Again, we examine Frisian separately as first and as second language.

The dependent variable was constructed by adding up all 17 items. The reliability of the sum scale turned out to be reasonable or good. *KR20* for all children, and for Frisian and Dutch children apart, amounted to .86, .63 and .80 respectively.

ANOVA for Frisian children

Focussing upon Frisian as first language we present the results of an analysis of variance on diminutive formation. We relate Frisian children's performance on the diminutive formation test to the factors age, gender and language environment. Table 4.13 shows the results.

The analysis of variance demonstrates two statistically significant main effects, but none of the interaction effects was significant. Regarding the effect of age, we observe that Frisian children in grade eight (mean=14.69) perform slightly better on the diminutive formation test than their Frisian schoolmates in the fifth grade, whose mean score amounts to 13.87. So there is some cross-sectional progress.

Table 4.13: ANOVA (regression approach) on diminutive formation for Frisian children

factor	SS	df	F	p
age (AG)	38.46	1	9.25	<.01
gender (GE)	4.50	1	1.08	n.s.
lang. env. (LE)	34.82	2	4.19	<.05
AG × GE	0.00	1	0.00	n.s.
AG × LE	10.30	2	1.24	n.s.
GE × LE	16.93	2	2.04	n.s.
AG × GE × LE	14.52	2	1.75	n.s.
mean (5 - 8)	13.87	14.69		
mean (♂ - ♀)	14.23	14.33		
mean (A - B - C)	13.98	13.94	14.69	

As regards the effect of language environment, it turns out that Frisian children's mean score obtained in school category C slightly surpasses the average scores in both categories B and A. The means were 13.98 (A), 13.94 (B) and 14.69 (C). However, a *HSD* test could not locate a significant difference between any two groups (α=.05).

ANOVA for Dutch children

We now focus on Frisian as second language. An analysis of variance has been carried out to detect factors that are possibly linked to the achievements of Dutch children. The next table portrays the results.

Table 4.14: ANOVA (regression approach) on diminutive formation for Dutch children

factor	SS	df	F	p
age (AG)	153.80	1	13.54	<.001
gender (GE)	69.71	1	6.14	<.05
lang. env. (LE)	555.12	2	24.43	<.001
AG × GE	32.68	1	2.88	n.s.
AG × LE	87.41	2	3.85	<.05
GE × LE	43.98	2	1.94	n.s.
AG × GE × LE	11.07	2	.49	n.s.
mean (5 - 8)	7.99	9.70		
mean (♂ - ♀)	8.14	9.48		
mean (A - B - C)	6.74	8.38	10.64	

Contrary to the results obtained among Frisian children, we find significant main effects of all factors involved. Language environment shows the strongest effect[26]. It appears that younger Dutch children (grade 5) perform worse than Dutch children in grade eight. The means are respectively 7.99 and 9.70. Furthermore, Dutch girls outstrip boys, the means being 9.48 for girls and 8.14 for boys. Finally, we find substantial differences between the average scores of Dutch children in the three language environments distinguished. The means for school categories A, B and C are 6.74, 8.38 and 10.64. Tukey's *HSD* test indicates that all differences between the groups are statistically significant ($p<.05$).

We do also observe a significant interaction effect between the variables age and language environment. Figure 4.2 depicts the effect.

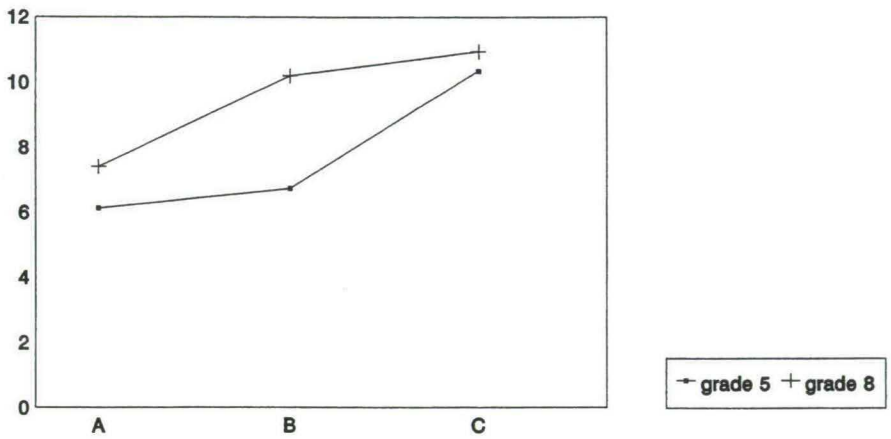

Figure 4.2: Dutch children's mean scores on diminutive formation, by language environment and age[27]

To locate differences between the means of the three language environments per age group, two one-way analyses of variance were computed and Tukey's *HSD* tests have been applied additionally ($\alpha=.05$). As regards fifth-graders, it turns out that the means between the school categories A and B differ significantly from the average score in category C. But the average scores obtained in categories A and B do not differ significantly from one another. In grade eight, the single significant difference between the means is found for the contrast between school category A on the one side, and the other two categories on the other. All this warrants the conclusion that young Dutch children need a lot of exposure to Frisian in order to acquire the rules for Frisian diminutive formation.

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[26] This can be seen from the highest Sum of Squares (SS) reported for the factor language environment.

[27] A/5=6.13, A/8=7.41, B/5=6.73, B/8=10.20, C/5=10.35, C/8=10.95

To verify the differences between the age groups per language environment, simple effect tests have been performed. These revealed that only the differences between the means obtained in language environments A and B were statistically significant (F-values being 6.26 ($p<.05$) and 9.26 ($p<.01$)).

Summary and concluding remarks

Broadly speaking, the data presented in this section point out that Frisian children perform fairly well on the diminutive formation task, although the use of the traditional */ke/* suffix seems to be losing ground. Older Frisian children perform somewhat better than younger ones. Like the case of breaking, this forms quite a late development, although it has also been shown that Dutch children do not fully espouse the Dutch diminutive system until the end of elementary school (Snow et al. 1980).

It also emerged that a small number of Frisian children (4%) did not show any standard diminutive suffixation of the 'risky' nouns ending in a vowel/diphthong or in */r/*. Among them, the traditional */ke/* suffix was completely ousted by */tsje/*. Moreover, it turned out that a vast majority of Frisian children (77%) uses the traditional */ke/* suffix occasionally in the same context. Interestingly, we heard some Frisian children correcting themselves (*/tsje/ > /ke/*), which probably signals linguistic insecurity. Finally, nearly one out of five Frisian children (19%) consistently applies standard suffixation in the said perilous context. All in all, the Frisian children's results fit well in De Haan's so-called 'transitional' grammar, which says that */ke/* or */tsje/* succeeds vowels and */r/*. In our opinion, transitional grammar does not necessarily end in 'final' grammar (only */tsje/* after vowels and */r/*), as cases of stable variation do occur (cf. Aitchison 1991, Hinskens 1992).

Lastly, the research data revealed that Dutch children tend to apply Frisian diminutive forms with difficulty. They characteristically overgeneralise the use of the typical */ke/* suffix. It turned out that older Dutch children outperform their younger schoolmates, girls achieve better than boys and importantly, Dutch children obtain higher scores as the degree of Frisianness of their language environment increases.

4.4 Je-verb conjugation

This section focusses on the second morphological variable investigated, the conjugation of Frisian *je*-verbs (see §3.2.1). As said before, Feitsma holds that inflectional endings in Frisian will be relatively resistant (1971:12-13). But there have been hardly any empirical studies into *je*-verb conjugation. There are some student studies which, among others, have looked into the conjugation of *je*-verbs and which may serve here as point of reference. Jonkman (1984) conducted a small study among 12 Frisian primary school children living in the village of *Aldskoat*. They produced 15 *je*-verb conjugations, three *e*-verb conjugations and one hybrid form. All this may indicate that Frisian youngsters are sometimes confused about the conjugation of *je*-verbs.

Eising et al. (1981) also investigated *je*-verb conjugation. Their informants, inhabitants of the village of *Abbegea*, were in three different age groups. It was found that the oldest Frisian subjects (60^{+}, $n=2$) produced 8% non-standard con-

jugation forms, whereas the youngest generation (10-20 *yrs*, *n*=16) yielded 25% non-standard conjugation forms. The mid-generation (30-50 *yrs*, *n*=14) did so in 11% of the cases. These results generally seem to confirm the hypothesis formulated that Frisian conjugation forms of *je*-verbs diminish in time, in favour of Dutch forms.

Recently, an inquiry among Frisian secondary school children (*n*=40) has been conducted by Hoekstra (1993). His data revealed that some *je*-verbs change more rapidly than others, whereby the phonotactic similarity between the Frisian and Dutch stem played a decisive role. Moreover, it was shown that infinitives and plurals are more fixed than finite singular forms (Hoekstra 1993:48).

Notwithstanding the three studies referred to, a sufficient body of empirical research is lacking. This is a bit startling, since it was noticed some time ago that Frisian is probably undergoing a morphological change in respect of the *je*-verb conjugation paradigm. In the early Sixties, Tamminga (1963:212) stated that *je*-verbs are susceptible to Dutch influence. Breuker (1979) also declared that Dutch forms intrude in the Frisian paradigm. He assumes that verbs which are similar in sound and form to their Dutch equivalents are most vulnerable to Dutch influences, an assumption which has been confirmed by Hoekstra's (1993) just mentioned data. Finally, De Haan (1990) has grammatically analysed the transition of *je*-verbs to the *e*-class. Contrary to Breuker, who stressed interlinguistic Dutch influences, De Haan interpreted the transition as a grammar-internal affair.

As stated before (§4.2.1), there has been some discord about the question whether strongly bound morphemes can be borrowed. Breuker (1984) takes the view that borrowing of bound morphemes is quite possible in the Frisian context, but Feitsma (1982) and De Haan (1990) do not share this opinion. The last named author speaks of rule-extension in Frisian (1990:117).

In this section, we describe and analyse the data gathered on *je*-verb conjugation. We explore the achievements of Frisian and Dutch children on the task at issue, and we relate their performance to the now familiar set of independent variables.

To begin with, the next table portrays the distribution of scores of Frisian and Dutch children. Bear in mind that the maximum score was 9.

Table 4.15: Scores on je-verb conjugation, for Frisian and Dutch children, in numbers (and %)

score	Frisian	(*n*=201)	Dutch	(*n*=206)
0	-		4	(1.9)
1	-		8	(3.9)
2	2	(1.0)	19	(9.2)
3	6	(3.0)	34	(16.5)
4	9	(4.5)	49	(23.8)
5	22	(10.9)	35	(17.0)
6	34	(16.9)	27	(13.1)
7	33	(16.4)	15	(7.3)
8	64	(31.8)	13	(6.3)
9	31	(15.4)	2	(1.0)
mean	6.94		4.41	
sd	1.64		1.91	

It appears that 31 out of 201 Frisian children (15%) obtain the maximum score (9). Nearly one-third (32%) of the Frisian children gained a score of eight. By comparison, the corresponding percentages for Dutch children are only 1 and 6%. Moreover, there are four Dutch children who never responded according to the rules, and eight Dutch children responded correctly for only one item. All in all, the figures above suggest that many Frisian children do fairly well on the *je*-verb conjugation test, while Dutch children perform rather poorly in general. This can also be seen from the means of both groups of children. Frisian children's mean comes to 6.94, while Dutch children obtain a mean of 4.41. A (one-way) analysis of variance proved that the difference between the means is highly significant ($F=205.02$, $df=1$, $p<.001$)[28].

In addition, we further analyse the results per separate test item. To start with, we examine the outcomes on the three items that were intentionally inserted as distractors (see §3.4.1). It should be stressed that these three verbs do not belong to the class of *je*-verbs. Nevertheless, in case of uncertainty about the classification of verbs into the *je*-class (Class 2, see §3.2.1) or the *e*-class (Class 1), one might predict that the distractors elicit overgeneralised *je*-verb forms. To check this, the following table indicates to what extent overgeneralisation actually happened among Frisian and Dutch children.

Table 4.16: Frequency of categorising Class 1 verbs into Class 2, in percentages

items	responses	Frisian (n=201)	Dutch (n=206)
wy bakke	bakke	73.3	34.6
(we fry)	bak*je*	8.4	21.2
	(other)	18.3	44.2
Peter sil winne	winne	87.1	58.6
(Peter will win)	win*je*	7.9	20.2
	(other)	5.0	21.2
Wim fertelt	fertelt	67.8	27.4
(Wim tells)	fertel*let*	27.2	37.5
	(other)	5.0	35.1

The responses above make clear that Frisian children are not always sure whether or not verbs belong to the category of *je*-verbs. The verbs *bakke* and *winne* both elicit a number of *je*-verb forms (8%). Frisian children are more tangled in the case of the verb *fertelle*, where the conjugation was in 27% according to *je*-verb rules. It should be remarked that the particular context of the test, in which the children perhaps may be mentally tuned to *je*-verb conjugation, might elicit responses at Class 1 verbs which are less frequently heard in everyday speech. However, incidental observations of the author's Frisian-speaking daughters confirm the reality of puzzlement about *je*-verb class membership.

[28] Note that the two groups showed homogeneous variances (Levene stat.=3.87, n.s.).

Next, the responses of Dutch children point out that they find even greater difficulty in correctly categorising verbs into the *je*-class. About one fifth wrongly place the first two verbs, *bakke* and *winne*, into this class. Remarkably, with regard to the verb *fertelle*, they choose the *je*-verb conjugation rule even more often (37%) than the right answer category (27%).

On the basis of these figures we conclude that there is indeed uncertainty among Frisian children about verb class membership. Dutch children are even far more insecure in this respect.

One may envisage that uncertainty about verb class membership is also reflected in the performance on the other items of the *je*-verb conjugation test. In the following, we discuss the results on that task, concentrating on the nine items that remained after reliability testing all items[29]. The next table represents the level at which the conjugation was according to the rules.

Table 4.17: Correct scores per item, for Frisian and Dutch children, in %

			Frisian	(*n*=201)	Dutch	(*n*=206)
items	person	tense	%	*it*-cor	%	*it*-cor
sykje	1sg	present	91.5	.16	75.7	.25
keapje	2sg	present	74.6	.36	36.4	.10
gapje	3sg	present	86.6	.14	62.6	.20
betelje	1sg	past	78.1	.31	54.4	.29
helje	2sg	past	27.9	.25	35.0	.13
wenje	3sg	past	84.1	.29	49.5	.18
sakje	1pl	present	82.1	.26	35.4	.25
timmerje	2sg	inf	87.1	.38	53.9	.20
opromje	2sg	past part	81.6	.26	37.9	.25
				alpha .58		*alpha* .48

From Table 4.17 it can be read that Frisian children generally perform about equally well at the conjugation of the different *je*-verbs, except for the verb *helje* (2sg, past), where only 28% apply the right conjugation. With this particular verb, the faulty (Dutchified) answer category *heldest* was chosen even more frequently (46%) by Frisian children. This error is understandable if one bears in mind the said uncertainty about verb class membership. The wrong answer category *heldest* betrays a conjugation as Class 1 verb. A further complication with this particular item is the complete similarity between present and past for 2sg (both *hellest*, see §3.2.1). This correspondence might trigger a sort of hypercorrection among Frisian children, whereby they insert */d/* to discriminate past tense. The credibility of the last mentioned cause of the extremely high frequency of the Dutchified *heldest* increases if we look at the outcomes at the commensurable item *betelje*

[29] The item *tekenje* was removed as it yielded negative item-total correlations both among Frisian and Dutch children.

(1sg, past). Distinctness does not apply here, and we find that 78% of Frisian children opt for the correct form *betelle*, while *betelde* occurred in 11% of the cases (see Table 4.18).

Interestingly, it appeared that the item with by far the fewest correct answers among the Frisian children (*hellest*) was also the sole item where the Frisian parents tested performed relatively poorly. Only about 2/3 of them (64%) used the right conjugation form.

All this relates to the possible internal transition of verbs in the */je/* class to the */e/* class, which De Haan (1990) refers to.

In the next table, we give an overview of the outcomes which point in the direction of an intralinguistic alteration. Table 4.18 gives the frequency of */je/* class and */e/* class conjugation among Frisian children.

Table 4.18: Frequency of /je/ class and /e/ class conjugation among Frisian children (n=201), per tense, in percentages

verbs	person	tense	*/je/* (correct)	*/e/* (wrong)
sykje	1sg	present	92	*1*
keapje	2sg	present	75	12
gapje	3sg	present	87	*4*
betelje	1sg	past	78	*11*
helje	2sg	past	28	46
wenje	3sg	past	84	*13*
sakje	1pl	present	82	5
timmerje	-	inf	87	6
opromje	-	past part	82	6

Examination of the figures above shows that a conjugation according to the rules of the */e/* class is more often found in the past tense than in the present tense. Apart from the special case of *helje* (2sg, past), which has just been discussed, we can compare the percentages of */e/* verb conjugation between 1sg-past and 1sg-present on the one hand, and 3sg-past and 3sg-present on the other. The differences resulting from these two comparisons amount to 10% (*11-1*) and 9% (*13-4*) respectively.

In part, the relatively frequent */e/* class conjugation in the past tense may be explained by the assumption that the past tense presumably has a comparatively low frequency (cf. Van Bree 1985:28-29).

Je-verb conjugation linked to the independent variables

This far we have discussed the outcomes per item. We now proceed to relate the achievements of Frisian and Dutch children on the *je*-verb conjugation task to their age and gender, and to the language environment in which they find them-

selves. The dependent variable has been constructed by condensing the items on the *je*-verb conjugation task into a sum scale.

Among the group of Frisian children there was one item (no. 6, see Appendix I) that showed negative correlations with the item-total. This particular item has been removed from the scale. The reliability of the scale, which then consisted of nine items, turned out to be reasonable. The value of *KR20* for all children and for Frisian and Dutch children separately, came to .67, .58 and .48 respectively. These values are not high, but they still permit a comparison between (sub)-groups.

ANOVA for Frisian children

First, an analysis of variance with *je*-verb conjugation as dependent variable has been carried out for Frisian children. As said, age, gender and language environment made up the three independent variables. Table 4.19 gives the outcomes.

Table 4.19: ANOVA (regression approach) on je-verb conjugation for Frisian children

factor	SS	df	F	p
age (AG)	69.08	1	29.08	<.001
gender (GE)	1.62	1	.68	n.s.
lang. env. (LE)	3.34	2	.70	n.s.
AG × GE	12.31	1	5.18	<.05
AG × LE	6.55	2	1.38	n.s.
GE × LE	.88	2	.19	n.s.
AG × GE × LE	6.13	2	1.29	n.s.
mean (5 - 8)	6.39	7.48		
mean (♂ - ♀)	6.73	7.05		
mean (A - B - C)	6.65	6.89	7.04	

Frisian children's results are clear cut with regard to the main effects encountered. There is one highly significant main effect of age. Young Frisian children's mean score on the *je*-verb test amounts to 6.39. Older Frisian children perform better. They gain a score of 7.48 on average.

The interaction effect between the variables age and gender is also statistically significant. Figure 4.3 represents that interaction effect.

Simple effect tests reveal that the differences between the means of Frisian boys and girls are statistically significant neither in grade five nor in grade eight. The F-values concerned were 3.54 ($p<.10$) and .10 respectively. By contrast, in comparison to their younger schoolmates, Frisian boys and girls display significantly higher mean scores in the highest grade. The F-values concerned were 23.38 for boys ($p<.001$) and 5.39 for girls ($p<.05$).

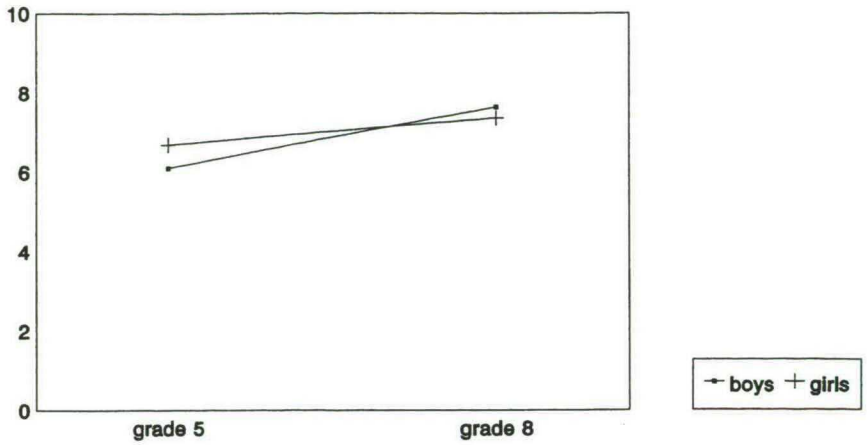

Figure 4.3: Frisian children's mean scores on je-verb conjugation, by gender and age[30]

In short, Figure 4.3 shows that Frisian boys and girls both exhibit cross-sectional development, but boys seem to make relatively more progress.

ANOVA for Dutch children

An analysis of variance has also been carried out on the results of Dutch children. Again, the performance on the *je*-verb conjugation task was linked to the factors age, gender and language environment. The following table reports the outcomes.

Table 4.20: ANOVA (regression approach) on je-verb conjugation for Dutch children

factor	SS	df	F	p
age (AG)	12.16	1	3.69	n.s.
gender (GE)	17.49	1	6.65	<.05
lang. env. (LE)	55.64	2	8.45	<.001
AG × GE	4.48	1	1.36	n.s.
AG × LE	2.43	2	.37	n.s.
GE × LE	.49	2	.07	n.s.
AG × GE × LE	4.19	2	.64	n.s.
mean (5 - 8)	4.18	4.57		
mean (♂ - ♀)	4.05	4.76		
mean (A - B - C)	3.93	3.93	5.10	

[30] ♂/5=6.10, ♂/8=7.64, ♀/5=6.68, ♀/8=7.36

Contrary to the results of Frisian children, we find no statistically significant main effect for the age variable. This is rather remarkable, as age proved to be influential as to both foregoing linguistic variables (breaking and diminutive formation). There is a significant main effect of gender, and the effect of the factor language environment is strongly significant. None of the interaction effects reaches a statistically significant level.

Concerning the effect of gender, it appears that Dutch girls score a little higher than boys. The respective means are 4.76 and 4.05. As regards the effect of language environment, it turns out that Dutch children's command of the *je*-verb conjugation paradigm is at its best in the most Frisian environment. The average scores for school category A, B and C are 3.93, 3.93 and 5.10 respectively. Tukey's *HSD* test determines that the means obtained in school category A and B do not differ significantly from one another. However, these two means are significantly lower than the average score obtained in category C (α=.05). Evidently, to make progress in the conjugation of Frisian *je*-verbs, Dutch children need a good share of exposure to the language.

Summary and concluding remarks

From the language data provided here, we conclude that Frisian children generally perform fairly well on the *je*-verb conjugation task. Even so, we did encounter signs of uncertainty about verb class membership: *e*-verbs were occasionally conjugated according to the */je/* class paradigm. Conversely, the data exposed various instances where *je*-verbs were conjugated as *e*-verbs. This internal transition was observed more often in the past tense than in the present tense, presumably because the past tense is less frequent. In addition, the oldest Frisian primary school children, and boys in particular, perform significantly better than younger children. Importantly, Frisian children's achievements were unrelated to the degree of Frisianness of their environment.

Dutch children perform poorly, although girls score a little higher than boys. It showed up that Dutch children achieve less poorly in the language environment where Frisian has a prominent place as spoken language (C), but Dutch children in language environment A and B performed at a comparable level. Evidently, Dutch children require a fair share of exposure to Frisian in order to make progress.

4.5 Lexical knowledge

The lexicon is often referred to in the literature as a prominent area of interlinguistic change (cf. Appel and Muysken 1987:164-174). Nevertheless, there is only one substantial empirically based study into lexical interference from Dutch into Frisian. This study was carried out by Sjölin (1976), who stated that massive lexical transfer is inevitable in the Frisian case. Despite the lack of empirical research, the Frisian lexicon is generally recognised by Frisian (socio)linguists as an important domain of change (Breuker 1979, De Haan 1990, Feitsma 1971, Sjölin 1976). Also De Haan (1990, 1992), who denies the existence of a general process of linguistic Dutchification, does acknowledge an extensive lexical borrowing from Dutch. Most likely, the fact that Dutch and Frisian are typologically

related languages (see §1.1) is conducive to the occurrence of lexical interference. More generally, lexical changes often arise swiftly. The reason behind this is that words are not strongly embedded in the language structure (Appel and Muysken 1987, De Haan 1990). That is also why one may assume that Frisian words are learned easily by speakers of Dutch. It is relatively simple for them to pick up loose Frisian words.

Lexical changes are most likely in the case of content words, i.e. nouns, verbs and adjectives (Appel and Muysken 1987:171, Van Bree 1985:7,26). Furthermore, loss of lexical items will generally occur more often in the productive vocabulary than in the receptive lexicon (Geelen and De Bot 1986:183).

Finally, it should be noted that in some bi- or multilingual situations one can even speak of *relexification* (cf. Hill and Hill 1977). In that case, words from a dominant language replace words in the minority language, while the latter maintains its grammar. Moreover, in order to speak of relexification, words in the minority language must be substituted to a great extent and the replacement has to be non-selective (Hagen and De Bot 1990:138-139).

In this section, the productive lexical knowledge of Frisian as first and second language is investigated. We primarily examine the performance of Frisian children, but we also analyse to what extent Dutch children acquire a Frisian vocabulary.

Table 4.21 first portrays the distribution of scores on the lexical test for Frisian and Dutch children. When interpreting the outcomes presented, one should recall that the maximum score amounts to 34.

The table clearly shows a ceiling effect among Frisian children. No less than 20% of them obtain the maximum score. By contrast, none of the Dutch children performs maximally. There are three Dutch children who perform minimally, that is, they did not know one single Frisian word. These three children all attend schools in category A. There is little opportunity for them in this language environment to have contact with Frisian. Finally, the strikingly high standard deviation among Dutch children (8.57) indicates a huge spread of scores.

All in all, the figures given in Table 4.21 lead us to conclude that the lexical knowledge of Frisian is quite reasonable among most Frisian children, and varies enormously among Dutch children. The difference between the groups of Frisian and Dutch children is large, as can be seen from the means obtained (31.91 vs. 18.21 respectively). This receives confirmation by a (one-way) analysis of variance which has been performed ($F=488.72$, $df=1$, $p<.001$)[31].

[31] Note that the two groups showed non-homogeneous variances (Levene stat.=299.37, $p<.001$).

Table 4.21: Scores on productive vocabulary, for Frisian and Dutch children, in numbers (and %)

score	Frisian	(*n*=202)	Dutch	(*n*=208)
0	-	-	3	(1.4)
1	-	-	1	(0.5)
2	-	-	2	(1.0)
3	-	-	3	(1.4)
4	-	-	5	(2.4)
5	-	-	3	(1.4)
6	-	-	3	(1.4)
7	-	-	8	(3.8)
8	-	-	3	(1.4)
9	-	-	8	(3.8)
10	-	-	7	(3.4)
11	-	-	7	(3.4)
12	-	-	6	(2.9)
13	-	-	3	(1.4)
14	-	-	10	(4.8)
15	-	-	10	(4.8)
16	-	-	9	(4.3)
17	-	-	7	(3.4)
18	-	-	6	(2.9)
19	-	-	3	(1.4)
20	-	-	9	(4.3)
21	1	(0.5)	9	(4.3)
22	-	-	9	(4.3)
23	-	-	13	(6.3)
24	-	-	9	(4.3)
25	3	(1.5)	4	(1.9)
26	1	(0.5)	7	(3.4)
27	2	(1.0)	2	(1.0)
28	8	(4.0)	7	(3.4)
29	9	(4.5)	12	(5.8)
30	14	(6.9)	6	(2.9)
31	24	(11.9)	3	(1.4)
32	41	(20.3)	6	(2.9)
33	58	(28.7)	5	(2.4)
34	41	(20.3)	-	-
mean	31.91		18.21	
sd	2.07		8.57	

Several responses by Frisian children consisted of Dutch loan words: Frisian *fjoer* (fire) became Dutch *vuur, sipel* (onion) became Dutch *ui*, and so on. Sometimes a Dutch loan word was 'Frisianised' in a way. The item *bûsdoek* (handkerchief, Dutch: *zakdoek*) was, for instance, Frisianised into *sekdoek*. The most difficult item, *stikelbaarch* (hedgehog; Dutch: *egel*) was phonologically adapted to Frisian in *e(g)el*. The same item also frequently (18 times) yielded *stikelfarken* as respons. Note that in this compound word, the Frisian element *baarch* was taken from Dutch (*varken*). As to the verbs, it turned out that the infinitive form of *je*-verbs was difficult for Frisian children. With the Frisian item *wurkje* (to work; Dutch: *werken) werke* (17x), *wurken* (7x) and *werkje* (6x) was used. The item *rûke* (to smell; Dutch: *ruiken*), which is not a *je*-verb, was wrongly realised as *rûkje* (6x) and even five times as *rûkjen*. Interestingly, one Frisian child (grade 8) who responded at the *je*-verb *wurkje* with *werke*, spontaneously remarked that she usually said *werke*. She added to this that her mother also used the same word, in contrast to her grandparents, who both said *wurkje*. This metalinguistic comment is a fine example of language awareness and intergenerational differences.

In view of Frisian children's responses, it is unsurprising to find that Dutch children also had great difficulty with the *je*-verbs asked for. *Werken* (to work; Frisian: *wurkje*) was realised by some Dutch children as *werkje* or *wurken*, and *ruiken* (Frisian: *rûke*) anew as *rûkje*.

Dutch children also showed characteristic errors. Sometimes they phonologically Frisianised basically Dutch words. The item *klein* (small; Frisian: *lyts*) was, for example, frequently Frisianised into *klien*, and *kaas* (cheese; Frisian: *tsiis*) got the Frisian */ea/* diphthong in *keas*. In these cases, their response often seems to result from trial and error. A second characteristic phenomenon observed among several Dutch children was schwa-deletion. This occurred for instance with the item *schaar* (scissors; Frisian: *skjirre*) which was realised as *skjir*, and also with *zon* (sun; Frisian: *sinne*), where *sin* was used. Note that these are items where Frisian children just perform maximally.

It appears that the lexical knowledge differs widely per item. This holds true both for Frisian and Dutch children, as can be derived from Table 4.22. The table makes clear that at least 90% of Frisian children respond correctly on about 4/5 of all items. Four words were always correct. The average correct score for all items is high for Frisian children (94%). Six out of seven items which get a correct score of less than 90% are nouns. The only exception is the verb *wurkje*, which relatively often yielded an incorrect response because it is a *je*-verb.

Interestingly, it showed up that the Frisian parents tested performed relatively poorly on two lexical items, *fjoer* and *wurkje*. Both items were rightly named by no more than 81% of the parents. The other ones said (Dutch) *vuur* and (Dutchified) *werke*. Remarkably, the just mentioned percentage (81%) for the word *fjoer* is even somewhat lower than the correct percentage observed among Frisian children (87%).

Dutch children's knowledge of Frisian words varies notably per item. They responded correctly for 84% on the 'easiest' item (*grien*), whereas *par* (pear) turned out to be the most difficult word, with a correct percentage of only 18%. Their mean correct score for all items was comparatively low (54%).

Table 4.22: Correct score per item, for Frisian and Dutch children, in percentages

items	Frisian % correct	(*n*=202) *it*-cor	Dutch % correct	(*n*=208) *it*-cor
grien green	100	-.-	84.1	.46
strjitte street	100	-.-	66.8	.47
sinne sun	100	-.-	66.3	.46
skjirre scissors	100	-.-	49.0	.53
grut great	99.5	.34	79.8	.53
read red	99.5	.34	78.4	.44
hûn dog	99.5	.07	73.1	.50
mûle mouth	99.5	-.04	68.3	.58
lyts small	99.5	.13	66.3	.57
skjin clean	99.5	.34	58.7	.52
tsiis cheese	99.0	.19	60.1	.63
boartsje to play	99.0	.09	59.1	.44
bôle bread	99.0	.29	53.8	.36
laitsje to laugh	98.5	.38	65.9	.52
hearre to hear	98.0	.15	63.9	.59
gûle to cry	98.0	.20	59.1	.53
hynder horse	98.0	.05	56.3	.56
tosk tooth	98.0	.29	44.7	.66
sjen to see	97.0	.02	69.7	.45
woartel carrot	96.5	.33	38.9	.52
jild money	96.0	.08	67.3	.62
tsjerke church	96.0	.26	50.0	.52
snein Sunday	95.0	.20	26.0	.43
ierappels potatoes	94.1	.27	52.4	.40
rûke to smell	92.6	.24	44.2	.47
smoarch dirty	92.1	-.05	59.6	.41
knibbel knee	89.6	.36	45.2	.47
fjoer fire	87.1	.14	30.3	.45
bûsdoek handkerchief	85.6	.31	30.3	.50
amer bucket	85.1	.25	42.3	.60
par pear	80.7	.19	17.8	.48
sipel onion	80.2	.21	36.1	.31
wurkje to work	76.2	.09	31.7	.46
stikelbaarch hedgehog	61.9	.35	25.0	.37
alpha		.62		.92
mean	93.7		53.5	

It has been argued that a 'critical mass of vocabulary' must be acquired as a condition for learning morphological rules (cf. Snow, Smith and Hoefnagel-Höhle 1980:551). Therefore, the low lexical knowledge of a portion of Dutch children may in part be responsible for their weak morphological achievement which we

have already observed for diminutive formation and *je*-verb conjugation (see §§ 4.3 and 4.4).

A relevant question is whether correct scores for Frisian and Dutch children relate to one another. To that end, we calculated the correlation between the (percentual) item correct scores of both groups of children. The correlation turns out to be strongly significant (r=.73, p<.001). The value of r is positive. On the whole, items which get a high correct score among Frisian children, also get a relatively high score among Dutch children. We find again that Dutch children's performance does in part mirror the achievements of Frisian children. In short, it was proved once more that patterns of first and second language acquisition bear some resemblance.

Lexical knowledge linked to the independent variables

We examined the connection between the lexical knowledge of Frisian and the factors age, gender and language environment. An analysis of variance was computed with lexical knowledge as dependent variable, and the three just mentioned independent variables. The variable representing lexical knowledge was constructed by adding up all lexical items elicited. This way we established one sum scale. The reliability of that scale turned out to be reasonable or good. The value of *KR20* for all children and for Frisian and Dutch children separately, was .96, .62 and .92. The relatively large discrepancy between the reliability coefficients for Frisian and Dutch children is in large part due to a ceiling effect among Frisian children.

ANOVA for Frisian children

First, an analysis of variance was carried out to trace the possible relation between lexical knowledge and Frisian children's age, gender and language environment. Table 4.23 presents the results.

Table 4.23: ANOVA (regression approach) on lexical knowledge for Frisian children

factor	SS	df	F	p
age (AG)	28.42	1	6.60	<.05
gender (GE)	4.44	1	1.03	n.s.
lang. env. (LE)	3.54	2	.41	n.s.
AG × GE	.35	1	.08	n.s.
AG × LE	3.22	2	.37	n.s.
GE × LE	.80	2	.09	n.s.
AG × GE × LE	.25	2	.03	n.s.
mean (5 - 8)	31.51	32.29		
mean (♂ - ♀)	31.70	32.08		
mean (A - B - C)	31.71	32.02	31.93	

The table displays a significant main effect of the age factor only. There were no significant interaction effects. It appears that older Frisian children (grade 8) have a slightly better lexical knowledge of Frisian than younger Frisian children in the fifth grade. Interpreting the effect of age, one should bear in mind that the means for the two age groups are 32.29 and 31.51, so the size of the difference is only small.

ANOVA for Dutch children

In addition to the outcomes for the group of Frisian children, we will now examine the results of Dutch children. Again, an analysis of variance has been carried out to trace the link between the lexical knowledge of Frisian and the factors age, gender and language environment. The following table gives the outcomes.

Table 4.24: ANOVA (regression approach) on lexical knowledge for Dutch children

factor	SS	df	F	p
age (AG)	2618.86	1	60.85	<.001
gender (GE)	339.38	1	7.89	<.01
lang. env. (LE)	3149.05	2	36.59	<.001
AG × GE	183.97	1	4.27	<.05
AG × LE	370.12	2	4.30	<.05
GE × LE	38.14	2	.44	n.s.
AG × GE × LE	73.91	2	.86	n.s.
mean (5 - 8)	14.85	21.83		
mean (♂ - ♀)	16.68	19.73		
mean (A - B - C)	13.05	17.30	22.63	

The table shows that all main effects reach a statistically significant level. Older Dutch children (grade 8) have a much better lexical knowledge of Frisian than their younger schoolmates. The respective means are 21.83 and 14.85. As regards the effect of gender, it shows up that girls (mean=19.73) perform better than boys (mean=16.68). Moreover, the lexical knowledge of Frisian steadily rises as the language environment is more Frisian. The means of Dutch children in school categories A, B and C are 13.05, 17.30 and 22.63 respectively. Tukey's *HSD* test ascertains that all differences between any two groups are statistically significant (α=.05).

In the table above, we find two statistically significant interaction effects as well. Figure 4.4 clarifies the first interaction effect, the one between gender and grade level.

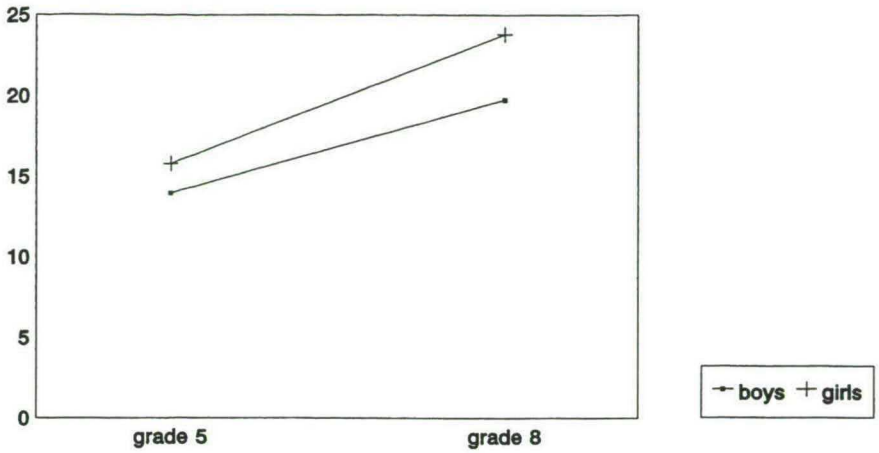

Figure 4.4: Dutch children's mean scores on lexical knowledge, by gender and age [32]

At first glance, the above average scores suggest that Dutch girls show somewhat more cross-sectional development than Dutch boys. To verify this, simple effect tests were performed. These indicated that Dutch boys and girls both make significant cross-sectional progress, the respective F-values were 21.57 ($p<.001$) and 38.41 ($p<.001$). Moreover, the difference between the mean scores of boys and girls in the fifth grade was non-significant (F=2.43), whereas the difference in grade eight turned out to be statistically significant (F=10.30, $p<.01$). To sum up, our previously mentioned impression that girls show more progress receives confirmation from the simple effect tests.

Figure 4.5 then elucidates the second interaction effect we encountered among Dutch children. It concerns the effect between the variables language environment and age.

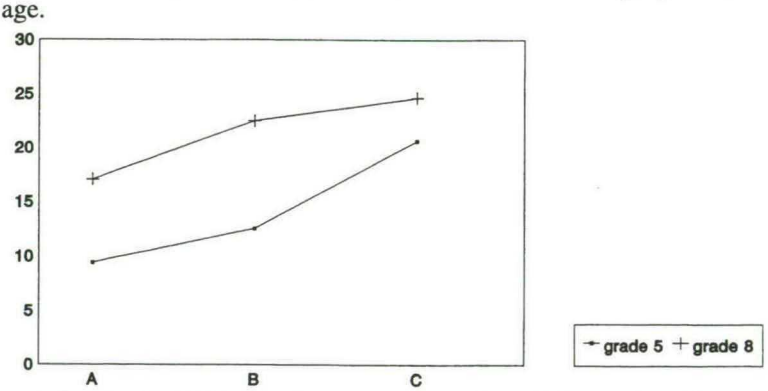

Figure 4.5: Dutch children's mean scores on lexical knowledge, by language environment and age [33]

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[32] ♂/5=13.95, ♂/8=19.76, ♀/5=15.79, ♀/8=23.82

[33] A/5=9.41, A/8=17.07, B/5=12.55, B/8=22.53, C/5=20.67, C/8=24.68

Broadly speaking, Figure 4.5 reveals that Dutch children in both grades perform better as the Frisianness of the language environment increases. Two separate one-way analyses of variance have been computed among Dutch children in grade five and eight to precise this general pattern. Both analyses do indeed confirm the just mentioned claim. The analyses both yielded significant effects of language environment. The F-values were 26.80 ($p<.001$) and 12.13 ($p<.001$) respectively.

Additional (Tukey) *HSD* tests show for the youngest Dutch children (grade 5) that their lexical knowledge of Frisian is superior in the most Frisian environment (C) when compared to their performance in both less Frisian school categories ($\alpha=.05$). Their lexical knowledge does not differ statistically significantly between category A and B. On the contrary, when looking at the oldest Dutch children (grade 8) one finds that the lexical knowledge of Frisian is worst in school category A. Tukey's *HSD* test indicates that their average score in this least Frisian environment differs statistically significant from the means obtained in B and C, the two stronger Frisian environments ($\alpha=.05$). The average scores in the latter two language environments do not differ statistically significant.

Simple effect tests have been performed per language environment to verify age differences. These tests proved that all age differences between the means obtained in language environments A, B and C were significant. The respective F-values amounted to 23.61 ($p<.001$), 37.06 ($p<.001$) and 7.05 ($p<.01$). On the whole, the above analyses reveal that young Dutch children require relatively great exposure to Frisian in order to obtain Frisian vocabulary.

Summary and concluding remarks

As mentioned earlier, the lexicon is often referred to in the literature as an important area of language change. Although the lexical items elicited consisted of core vocabulary, we came across various Dutch loan words, especially nouns, among the Frisian children tested. Yet, as the replacement of Frisian words is selective - some words lose ground but other ones do not - relexification does not seem to be at stake. In several cases, loan words were 'Frisianised' in some way or another. Frisian children's knowledge of Frisian words did not relate to the degree of Frisianness/Dutchness of their environment. As the lexicon presumably is the most easily diffused language sector (see §2.5), this finding is somewhat remarkable.

The lexical knowledge of Frisian varies tremendously among Dutch children. Yet, they know few Frisian words in general. Some of them failed to name even one single Frisian word. On the other hand, some others have acquired quite a substantial Frisian vocabulary. It appeared that older Dutch children do by far outstrip younger ones, and the lexical knowledge of Frisian clearly rises as the language environment is more Frisian. Lastly, it turned out that Dutch girls outperform boys, and they also show more cross-sectional growth in their lexical knowledge.

4.6 Verb-raising

This section centres at the phenomenon of verb-raising, the syntactic variable that forms part of our study. Generally speaking, syntax forms a stable domain of language (see §2.5). As a consequence, Appel and Muysken (1987:162) conclude that syntactic borrowing is not very likely to occur. As far as it happens, it in-

volves imitation of prestige language patterns. Yet, it has been noticed that Dutch word order patterns in the verbal complex are gaining influence in younger speakers' Frisian (Tiersma 1985:123). In relation herewith, De Haan (1990:116) contends that it is not possible to account for the inversion properties of Dutchified Frisian on the basis of syntactic borrowing. We come back to this in the section on intergenerational differences (§4.8).

As said (§1.2.2), little empirical research has been done on verb-raising. A limited student study was conducted by Jonkman (1984) in the village of *Aldskoat*. It was concluded that half of the Frisian primary school children (n=12) met difficulties performing the verb-raising task according to standard Frisian, whilst their parents did not encounter this sort of problem. Similarly, a study by Eising et al. (1981) demonstrated a tendency towards generational differences as regards word order in the verbal complex. Their informants lived in the village of *Abbegea*. The eldest Frisian subjects (60^{+}, n=2) realised only standard verb orders in dependent clauses, whereas the youngest generation (10-20 *yrs*, n=16) yielded 10% non-standard orders. The mid-generation (30-50 *yrs*, n=14) did so in 6% of all possible cases.

In sum, the forementioned studies lead us to presume that Frisian children will not always carry out our syntactic task in accordance with the rules of standard grammar.

Presenting the outcomes of our study, we first describe the results on the verb-raising task. Table 4.25 shows the distribution of scores on the verb-raising test obtained by Frisian and Dutch children. Note that a correct score solely implies that the order of the verbs was according to Frisian grammar; the forms applied were not taken into consideration (see §3.4.1). Interpreting the figures portrayed in Table 4.25, one has to keep in mind that the maximum score was eight.

Table 4.25: Scores on verb-raising, for Frisian and Dutch children, in numbers (and %)

score	Frisian	(n=200)	Dutch	(n=206)
0	5	(2.5)	14	(6.8)
1	13	(6.5)	30	(14.6)
2	36	(18.0)	36	(17.5)
3	32	(16.0)	48	(23.3)
4	33	(16.5)	30	(14.6)
5	31	(15.5)	23	(11.2)
6	16	(8.0)	14	(6.8)
7	15	(7.5)	8	(3.9)
8	19	(9.5)	3	(1.5)
mean	4.11		3.13	
sd	2.13		1.89	

The table shows that five Frisian children perform minimally. Evidently, standard Frisian verb order does not hold true for them. They use Dutch word order in producing the verbal complex in Frisian. Moreover, excluding these five Frisian children, over half of the Frisian children (n=114) apply standard Frisian verb

order only for maximally half of the cases (scores 1 through 4). The maximum score is obtained by no more than 19 Frisian children (10%). The relatively high standard deviation of Frisian children's scores betrays much variability. These findings lead us to assert that Frisian verb order is exceedingly unstable among the Frisian children tested.

Worth mentioning is the finding that Frisian parents also show variability. Although 85% of them apply standard Frisian verb order only, there are, for example, also two parents who apply the Frisian order in less than half of the cases (score 3).

During the data collection carried out at the homes of Frisian families, we observed several interesting events that may in a way validate the outcomes on the verb-raising test. In one family, for example, a younger sister of a Frisian child tested, commented as follows whilst her father carried out the task: *Dat soe ik ek wol wolle dwaan* (That should I also [wol] want do). It should be noted that the responses of the father did not deviate at all from the standard. In another case, a father was carrying out the sentence completion task. On one particular item, he answered in accordance with the standard: *Do soest ek wol op myn feestje komme kinne* (You should also [wol] on my party can come). The son, who had been one of the informants, looked at his father's correct answer and remarked: *Kinne komme, kin ek wol* (Can come, that's also possible). Then his father replied: *Ja, mar sa sis ik it net* (Yes, but that's not the way I say it). This is a nice example of an intergenerational clash.

There are three Dutch children who consistently apply standard Frisian verb order. It is a safe guess to state that they have successfully acquired the rule in hand. However, the performance of these three children is quite exceptional, as Dutch children generally perform low. A portion of them, nearly 7%, fails to realise even one standard verb order.

The means obtained by Frisian and Dutch children (4.11 vs. 3.13) do not deviate strongly. Yet, they differ to a statistically significant degree, as was proved by a one-way analysis of variance ($F=23.80$, $df=1$, $p<.001$).

The standard deviations listed in Table 4.25 indicate a somewhat greater variation in first language acquisition ($sd=2.13$) than in second language acquisition ($sd=1.89$)[34]. Such a pattern contradicts the usual belief of variability in second language acquisition exceeding variation in first language acquisition (cf. Wong-Fillmore 1991:61). That underlines once more the instability of Frisian verb order among Frisian children.

In addition, we look at the outcomes per individual test item. Table 4.26 demonstrates considerable differences between the distinct items. As to the infinitives both ending in */e/* it is found that the item *falle litte* scores considerably higher than *komme kinne*. The difference comes to 27.5% for Frisian children and 21.7% for Dutch children. The reason behind this might be that the verbs *falle* and *litte* form an idiomatic couple. In English, this couple can be semantically expressed by one verb: *to drop*. However, on this line of reasoning it remains unclear why the item *(hie) falle litten* scores a little lower than the item *(hie) helpe moatten*.

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[34] A test for homogeneity of variances indicates that the variances differ to a statistically significant degree (Levene stat.=4.72, $p<.05$).

We return to the striking difference between the items *falle litte* and *komme kinne* later on.

Table 4.26: Correct score per item, for Frisian and Dutch children, in %

items	Frisian (*n*=200) %	*it*-cor	Dutch (*n*=206) %	*it*-cor
infinitives both end in */e/*				
falle litte	69.5	.35	65.2	.27
komme kinne	42.0	.51	43.5	.42
infinitives end in */en/* and in */e/*				
sjongen hearre	49.5	.44	29.5	.36
lizzen bliuwe	62.0	.48	51.9	.48
to have + perfect participle + infinitive */e/*				
(hie) helpe moatten	56.5	.50	44.9	.11
(hie) falle litten	49.5	.53	40.6	.10
to have/be + perfect participle + infinitive */en/*				
(ha) rinnen sjoen	44.5	.48	22.7	.10
(is) lizzen bleaun	37.0	.47	15.0	.06
		alpha .77		*alpha* .59

Second, as to the rule of 'infinitives ending in */en/* and in */e/*' it is found that the item *lizzen bliuwe* gets considerably more standard responses than the other item *sjongen hearre*. The difference amounts to 13% for the Frisian children. In part, the explanation for this difference can be that *bliuwe* (to stay) typically goes with positional verbs (as *lizzen* (to lay)), and is therefore more stable.

Focussing upon the group of Frisian children, we will now have a look at the responses chosen on each separate item. Table 4.27 gives the figures concerned.

First, it appears that for seven out of eight items (nos. 2 through 8), the asterisked (correct) answer is given rather infrequently. The correct percentages amount to 38% or lower.

As regards the second and third items, *komme kinne* and *sjongen hearre*, it turns out that the (second) answer category, in which the verbs are in the wrong order, is more frequent than the (first) correct category. The inverted *kinne komme* is even used in nearly half of the cases (49%). This becomes understandable by referring to inversion possibilities in Dutch. The Frisian test sentence ran *Do soest ek wol op myn feestje komme kinne*. In Dutch: *Jij zou ook wel op mijn feestje kunnen komen*. Inversion (*Jij zou ook wel op mijn feestje komen kunnen*) is unusual. Compare this to the test sentence *Do moatst dy faas net falle litte*. Here, *vallen* is normally stressed: *Jij moet die vaas niet laten vàllen* and in this case, inversion seems to be allowed (*Jij moet die vaas niet vàllen laten*).

In brief, *kunnen komen* is the only possible sequence in Dutch, and this may cause the high frequency of the faulty *kinne komme* in Frisian.

Table 4.27: Frequency of Frisian children's responses, in percentages (n=200)

. infinitives both end in /e/					
(1)	falle litte*	60.5	(2)	komme kinne*	38.5
	litte falle	24.0		kinne komme	49.0
	falle litten	7.0		komme kinnen	2.5
	litten falle	2.5		kinnen komme	0.5
	fallen litte	1.5		kommen kinne	1.0
	litte fallen	4.0		kinne kommen	7.5
	fallen litten	0.5		kommen kinnen	-
	litten fallen	-		kinnen kommen	1.0
. infinitives end in /en/ and in /e/					
(3)	sjongen hearre*	20.0	(4)	lizzen bliuwe*	27.0
	hearre sjongen	28.0		bliuwe lizzen	18.5
	sjongen hearren	1.5		lizzen bliuwen	2.5
	hearren sjongen	2.5		bliuwen lizzen	1.0
	sjonge hearre	22.5		lizze bliuwe	21.0
	hearre sjonge	18.5		bliuwe lizze	15.0
	sjonge hearren	5.5		lizze bliuwen	11.5
	hearren sjonge	1.0		bliuwen lizze	3.5
. to have + perfect participle + infinitive /e/					
(5)	helpe moatten*	30.5	(6)	falle litten*	32.0
	moatten helpe	3.0		litten falle	7.5
	helpe moatte	21.0		falle litte	8.0
	moatte helpe	21.5		litte falle	23.5
	helpen moatten	2.0		fallen litten	4.5
	moatten helpen	7.0		litten fallen	3.5
	helpen moatte	3.0		fallen litte	5.0
	moatte helpen	11.5		litte fallen	15.5
. to have/be + perfect participle + infinitive /en/					
(7)	rinnen sjoen*	33.0	(8)	lizzen bleaun*	28.0
	sjoen rinnen	19.0		bleaun lizzen	18.5
	rinnen sjen	3.0		lizzen bliuwe	6.0
	sjen rinnen	6.5		bliuwe lizzen	18.5
	rinne sjoen	11.5		lizze bleaun	9.0
	sjoen rinne	22.0		bleaun lizze	11.5
	rinne sjen	1.5		lizze bliuwe	4.0
	sjen rinne	3.5		bliuwe lizze	3.5

Only the item *falle litte* gets a majority of correct responses (60%). As said, this might be explained by the fact that both verbs are idiomatically coupled. The fact that *vallen laten* is allowed in Dutch may be an additional factor reinforcing Frisian *falle litte*.

It has been noted that there is a tendency in present-day Frisian to replace infinitives terminating in */en/* by infinitives ending in */e/*. This occurs, for

instance, in infinitival morphology of the Frisian *te+infinitive* (cf. De Haan 1990: 116). Such a trend might explain the relatively frequent occurrence at the third and fourth item of the answer categories *sjonge hearre* (22%), *lizze bliuwe* (21%), and their inverted forms *hearre sjonge* (18%) and *bliuwe lizze* (15%). The two latter answer categories are the most Dutchified ones.

There are two other strongly Dutchified answer categories with a high frequency. These are *moatte helpe* (5th item) and *litte falle* (6th item). Both answer categories are Dutch-inspired in different respects. First, verb order is Dutch. Second, Dutch *Infinitive-Pro-Participle* (*IPP*), which does not occur in standard Frisian, is applied here. *IPP* implies that past participle morphology of verbs governed by Dutch verbs as *hebben* (to have) and *zijn* (to be) is replaced by infinitives, and this is what seemingly has happened in the answer categories *moatte (helpe)* and *litte (falle)*.

Verb-raising linked to the independent variables

To enable analyses of variance on verb-raising, we created a scale by summing the eight items concerned. The reliability of the sum scale turned out to be fairly reasonable, especially when taking into consideration the low number of items involved. The value of Kuder-Richardson's reliability coefficient (*KR20*) for all children and for Frisian and Dutch children apart, amounts to .76, .77 and .59.

ANOVA for Frisian children

It was demonstrated in the foregoing that Frisian children generally perform rather poorly on the verb-raising task. In addition, by means of an analysis of variance we now further examine whether or not their performance relates to their age and gender, and to the degree of Frisianness of their school environment. Table 4.28 summarises the outcomes.

Table 4.28: ANOVA (regression approach) on verb-raising for Frisian children

factor	SS	df	F	p
age (AG)	27.03	1	5.99	<.05
gender (GE)	2.68	1	.59	n.s.
lang. env. (LE)	5.00	2	.55	n.s.
AG × GE	.01	1	.00	n.s.
AG × LE	23.85	2	2.65	n.s.
GE × LE	2.16	2	.24	n.s.
AG × GE × LE	.44	2	.05	n.s.
mean (5 - 8)	3.77	4.44		
mean (♂ - ♀)	3.89	4.21		
mean (A - B - C)	3.78	4.00	4.27	

The table displays a statistically significant main effect for age, but gender and language environment are no influential factors. The means of both grade levels (3.77 vs. 4.44) give proof of a relatively better performance among older Frisian children. There are no significant interaction effects.

ANOVA for Dutch children

Analogous to the group of Frisian children, we linked Dutch children's performance on the verb-raising test to their age and gender, and to the linguistic make up of their everyday environment. The following table gives an overview of the results of an analysis of variance that has been carried out.

Table 4.29: ANOVA (regression approach) on verb-raising for Dutch children

factor	SS	df	F	p
age (AG)	12.49	1	3.76	n.s.
gender (GE)	.41	1	.12	n.s.
lang. env. (LE)	40.52	2	6.10	<.01
AG × GE	2.41	1	.73	n.s.
AG × LE	10.04	2	1.51	n.s.
GE × LE	1.24	2	.19	n.s.
AG × GE × LE	11.58	2	1.74	n.s.
mean (5 - 8)	2.89	3.36		
mean (♂ - ♀)	2.99	3.24		
mean (A - B - C)	3.45	2.42	3.43	

The table shows a significant main effect for the factor language environment. Dutch children in school category A, B and C obtain mean scores of 3.45, 2.42 and 3.43 respectively. Tukey's *HSD* test further ascertains that the average scores in school categories A and C differ significantly from the mean in category B, but the means obtained in categories A and C do not differ from one another (α=.05). It is hard to interpret why it is that Dutch children perform poorest in the mixed language environment (B).

The absence of a main effect of age corresponds to the outcomes on *je*-verb conjugation, but it is unlike the other linguistic variables investigated (i.e. breaking, diminutive formation and lexical knowledge) where age turned out to be influential.

As was the case among Frisian children, there are no significant interaction effects.

Summary and concluding remarks

The two studies cited at the beginning of this section already led us to surmise that Frisian children's achievements on the verb-raising task would not be completely standard. The findings presented here support this. From the syntactic data collected it can be seen that a minor portion of Frisian children (2%) perform minimally on the verb-raising test. For them, standard Frisian order in the verbal complex of main clauses does not exist. Furthermore, it was observed that no more than 9% of Frisian children proved to master proper Frisian verb order fully, while a mere 1% of Dutch children did so. In addition, 89% of Frisian children applied standard verb order every now and then (i.e. 1 to 7 out of 8 cases). Consequently, we find a lot of variability in Frisian children's results,

even more than among the Dutch children tested. The latter perform poorly in general; only a minor portion of them (1%) has successfully acquired the Frisian verb order. As was the case for most other linguistic variables studied, Frisian children's performance was not linked to the degree of Frisianness of their language environment.

Notwithstanding the fact that older Frisian children achieve slightly better than younger children (age-grading), the research data lead us to assert that Frisian word order in the verbal complex is extremely unstable among Frisian primary school children. As distinct from De Haan (1990:116) we are inclined to interpret our results in terms of a process of *interlinguistic* change in Frisian syntax. In the following section about intergenerational differences (§4.8) we come back to the view that verb-raising indicates interlinguistic change.

Finally, it showed up that certain structural characteristics of Dutch relate to non-standard responses among Frisian children, affecting verb order and past participle morphology as well. Notably, it appeared that unstressed core verbs in Dutch, which cannot be inverted in Frisian, bring about incorrect (Dutchified) inversions in that language. It also emerged that Dutch *Infinitive-Pro-Participle* occasionally crops up in Dutchified Frisian.

4.7 Index of knowledge of Frisian

So far we have looked at the achievements on each distinct linguistic variable. In addition, we will now attempt to construct an overall index of knowledge of Frisian (*KOF*) on the basis of the five separate linguistic variables. The great benefit of such an index is that it enables us to undertake a broad analysis (of variance) on knowledge of Frisian that over-rides accidental test-bound peculiarities.

In order to check whether creation of such a general index is warranted, we first investigate whether or not the five linguistic variables distinguished relate to one another. A correlation matrix between the five linguistic variables has therefore been calculated. The matrix is presented in Table 4.30. The table contains the correlation coefficients between the linguistic variables for all children, and for Frisian and Dutch children separately.

Nearly all correlations are statistically significant. The only exception is found among the group of Frisian children, where breaking and diminutive formation do not correlate significantly with verb-raising. This underscores the somewhat distinctive position of the syntactic variable. The special position of verb-raising can also be seen from the comparatively low correlations between verb-raising and the other linguistic variables.

As regards the separate groups of children (Frisian and Dutch), the highest correlation coefficient arrived at is found among Dutch children. Diminutive formation and lexical knowledge correlate quite strongly (r=.61). This reminds us of the remark by Snow and associates that a 'critical mass of vocabulary' must be acquired as a condition for learning morphological rules (cf. Snow, Smith and Hoefnagel-Höhle 1980:551).

Table 4.30: Pearson's r between the linguistic variables

	DIM	JE-V	LEX	V-RAIS
All (*n*=405)				
BRE	.63**	.60**	.70**	.28**
DIM	-	.55**	.76**	.27**
JE-V	-	-	.60**	.32**
LEX	-	-	-	.28**
Frisian (*n*=200)				
BRE	.29*	.40**	.47**	.14
DIM	-	.34**	.26**	.12
JE-V	-	-	.35**	.26**
LEX	-	-	-	.23**
Dutch (*n*=205)				
BRE	.42**	.27**	.53**	.19*
DIM	-	.26**	.61**	.19*
JE-V	-	-	.36**	.22**
LEX	-	-	-	.20*

The above results suggest that it is possible to condense the scores on the five language tests into one overall index of knowledge of Frisian (*KOF*). This is confirmed by factor analyses that were carried out on the language tests. The factor analysis for all children, and the separate analyses for Frisian and Dutch children consistently came up with a one-factor solution[35]. So the correlation analysis and the factor analyses all suggest that it is justifiable to construct an index.

The index was created as follows. First, the separate test scores were transformed to 11-point scales (ranging from nil to 10). These scales were then summed to one index. The minimum value of the *KOF* index was nil (5×0), and the maximum value amounted to 50 (5×10).

The maximum score (50) was accomplished by only one Frisian child, whereas the highest score realised by a Dutch child came to 44. In contrast, the lowest score realised by a Frisian child was 20 and one Dutch child had an *KOF* score of 2. Taking one standard deviation below the mean score of Frisian children as minimum norm (36.92-6.00=30.92) for Dutch children, it can be determined that 20 Dutch children (9.7%) perform beyond this hypothetical norm.

The *KOF* index is based on language tests which for the most part aim at formally defined linguistic elements. Yet, we maintain that the knowledge of Frisian measured by the tests does reflect proficiency in the language. This seems warranted for different reasons.

[35] The factor-analysis for all children came up with a one-factor solution (eigenvalue=3.07, 61% of explained variance). The factor loadings were .89 (lexical knowledge), .85 (breaking), .85 (diminutive formation), .79 (*je*-verb conjugation) and .46 (verb raising).

First, it appeared that the scores on the index correlated significantly with a quality judgement of spoken Frisian that took place in the project *Language Assessment in Friesland* (De Jong and Riemersma 1994:119). The correlations arrived at amounted to .50 for Frisian children (n=54, p<.001) and .63 for Dutch children (n=55, p<.001). For all children, the correlation comes to .83 (p<.001). It should be noted that the correlation coefficient among the Frisian children was kept down by the low spread of the quality judgement (sd=.67 vs. 1.87 for Dutch children). Viewed in that light, the relationship between *KOF* and the quality judgement of spoken Frisian is considerable.

Second, in a factor analysis carried out on the language tests it was demonstrated that vocabulary - a common measure of language proficiency - loaded heavily on the factor knowledge of Frisian (see note 35).

ANOVA for Frisian children

To perform the overall analysis alluded to in the beginning of this section, an analysis of variance has been carried out to find out whether Frisian children's knowledge of their first language relates to their age, gender and language environment. The next table portrays the results.

Table 4.31: ANOVA (regression approach) on KOF for Frisian children

factor	SS	df	F	p
age (AG)	905.47	1	28.61	<.001
gender (GE)	120.20	1	3.80	n.s.
lang. env. (LE)	143.62	2	2.27	n.s.
AG × GE	23.17	1	.73	n.s.
AG × LE	45.71	2	.72	n.s.
GE × LE	4.84	2	.08	n.s.
AG × GE × LE	4.53	2	.07	n.s.
mean (5 - 8)	34.83	39.09		
mean (♂ - ♀)	36.03	37.75		
mean (A - B - C)	35.90	36.82	37.62	

Age is the sole variable that displays a statistically significant main effect among Frisian children. It is clearly an influential variable, as older Frisian children perform considerably better. The mean *KOF* score of younger Frisian children comes to 34.83, whereas older children score 39.09 on average. From the table it can be seen that none of the interaction effects is statistically significant.

ANOVA for Dutch children

Analysis of variance has been computed to investigate the connection between Dutch children's knowledge of Frisian and their age, gender and language environment. The following table gives the outcomes.

Table 4.32: ANOVA (regression approach) on KOF for Dutch children

factor	SS	df	F	p
age (AG)	1708.99	1	44.59	<.001
gender (GE)	384.48	1	10.03	<.01
lang. env. (LE)	1842.11	2	24.03	<.001
AG × GE	104.75	1	2.73	n.s.
AG × LE	314.52	2	4.10	<.05
GE × LE	3.23	2	.04	n.s.
AG × GE × LE	12.71	2	.17	n.s.
mean (5 - 8)	18.42	24.20		
mean (♂ - ♀)	19.52	22.80		
mean (A - B - C)	18.04	19.18	24.89	

As distinct from the analysis among Frisian children, Table 4.32 shows that every main effect is statistically significant. Gender turns out to be the least powerful independent variable. Older Dutch children demonstrate a substantial gain in their knowledge of Frisian, if we compare their achievements to those of younger Dutch children. The means concerned are 24.20 (grade 8) and 18.42 (grade 5). Furthermore, girls (mean=22.80) excel over boys (mean=19.52). The main effect of language environment is strong. The means for the three categories amount to 18.04, 19.18 and 24.89 respectively. These figures already suggest that the difference between the school categories is located in category C, where the average score by far surpasses the means obtained in both categories A and B. Tukey's *HSD* test confirms this (α=.05).

Contrary to the outcomes among Frisian children, we come across a significant interaction effect. The next figure represents the interaction effect between the variables grade level (age) and language environment.

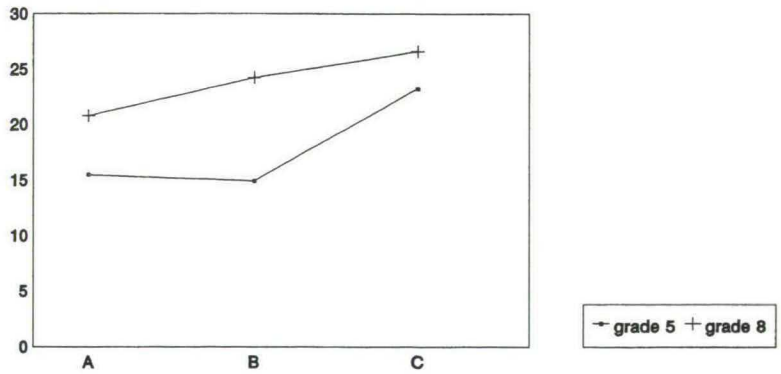

Figure 4.6: Dutch children's mean KOF scores, by language environment and age [36]

[36] A/5=15.48, A/8=20.78, B/5=14.91, B/8=24.22, C/5=23.24, C/8=26.62

Two distinct one-way analyses of variance were carried out per age level. These both revealed statistically significant effects of language environment. The F-values concerned were 21.88 ($p<.001$) and 7.01 ($p<.01$) respectively. Tukey's *HSD* test reveals that among the youngest Dutch children, those in environment C excel over the other children in both categories A and B. The latter two do not achieve differently from each other. In connection with the older Dutch children, an *HSD* test solely determined a difference between the two extreme language environments (A and C).

Again, simple effect tests have been applied to check the differences between the means of the age groups per language environment. These revealed that all differences were statistically significant. The respective F-values amounted to 11.87 ($p<.01$), 36.60 ($p<.001$) and 5.64 ($p<.05$).

All in all, the interaction effect between the variables of grade level and language environment can be largely ascribed to the relatively poor performance of the youngest Dutch children in environment B. Apparently, they fail to develop their command of Frisian as second language in this mixed environment, while older Dutch children in the same environment derive some profit from exposure to Frisian.

From the foregoing analyses it can be seen that the factors of age, gender and language environment are not equally important to the acquisition of Frisian as first and second language. It seems that age is highly relevant to Frisian children's knowledge of Frisian, whereas age and language environment are the major determiners of Dutch children's knowledge of Frisian. We will now attempt to assess the relative impact of the independent variables distinguished by means of two multiple-regression analyses, one for Frisian and the other for Dutch children. The index of knowledge of Frisian constitutes the criterion variable and age (AG), gender (GE) and language environment make up the set of predictors entered into the equation. Language environment has been entered after dummy coding (cf. Rietveld and Van Hout 1993:102). The dummy variables are denoted as LE1 and LE2. The table below presents the outcomes.

Table 4.33: Stepwise multiple-regression analysis on KOF, for Frisian and Dutch children

	Frisian (n=200)		Dutch (n=205)
Multiple *R*	.36	Multiple *R*	.58
R square	.13	*R* square	.34
	beta		beta
AG	.36***	AG	.37***
GE	.12	LE1	-.40***
LE1	-.11	LE2	-.31***
LE2	-.01	GE	.19**

As regards Frisian children, we find that age is the major predictor. The beta's of the other factors (language environment and gender) are not statistically significant.

As far as Dutch children are concerned, it appears that the factors distinguished have considerably more predictive power. Altogether, they predict a third part of the variance of *KOF* scores. The beta's of the factors are statistically significant.

In the next chapter about Dutch children's socio-psychological disposition towards Frisian, we shall examine to what extent attitudes, motivation and self-confidence help to predict Dutch children's knowledge of Frisian.

4.8 Intergenerational differences

Thus far we have looked at the achievements of Frisian and Dutch primary school children in distinct sectors of language and we have composed and analysed a general index of knowledge of Frisian. We now propose to explore possible intergenerational differences in the command of Frisian as first language. Such differences potentially signal language change. We shall contrast the achievements of the eldest Frisian children taking part in the study (grade eight) with those of a randomly selected group of Frisian parents (see §3.3).

The age of crystallisation of first language acquisition is commonly set between five and thirteen years of age (cf. Schaerlaekens and Gillis 1987). According to Singleton (1989:54-56) continued language development is most obvious at the semantic and pragmatic level, whilst morphosyntactic development beyond the childhood years is less noticeable. By focussing on the performance of the group of eldest Frisian children - who are about twelve-year-old - we minimise an interfering effect of age-grading, although we acknowledge that some development after childhood is not entirely impossible. We return to this further on.

Beforehand, we notice that the Frisian parent group seems to be rather sensitive to the 'correctness' of their children's usage of Frisian. First, we asked them to indicate whether they expend effort on the correctness of their children's use of Frisian. The results pointed out that 8% of the parents (n=52) reported often paying attention to the language use of their children, and 63% did so every now and then. The remaining parents (29%) did not put any effort into the correctness of their children's Frisian.

More specifically, we also asked the Frisian parents whether they corrected their children when they made mistakes in their first language. Of all parents, 11% said they did so often, the majority (58%) reported correcting their children 'sometimes', nearly a quarter of them (23%) claimed to correct 'occasionally', and 8% of the parents took no notice of their children's mistakes in Frisian. On the whole, these figures confirm that most Frisian parents do attach some value to their children speaking Frisian properly.

Earlier we noticed that 10% of Frisian parents gain a maximum score on every language test (see §4.1). What is their performance compared to the achievements of the eldest Frisian children? Table 4.34 provides the statistics to answer this question. The table lists the mean scores obtained by the *eldest* Frisian children (grade 8) and the Frisian fathers and mothers on the five language tests.

Table 4.34 indicates substantial and systematic contrasts between the performance of the groups distinguished. Separate one-way analyses of variance have been carried out on the five linguistic variables under consideration. These analyses

consistently show that the differences between the mean scores of the three groups are statistically highly significant ($p<.001$). Subsequent multiple-comparison tests (Tukey's *HSD*) showed that the scores of the children continually lay firmly behind those of fathers and mothers ($\alpha=.05$). We will come back to this.

Table 4.34: Mean scores on the language tests of eldest Frisian children and parents

	grade 8 (n=102)	fathers (n=26)	mothers (n=26)	F	p
breaking	10.74	13.65	13.62	15.86	<.001
dim. formation	14.69	16.23	16.27	15.45	<.001
je-verb conjugation	7.40	8.35	8.23	7.64	<.001
lex. knowledge	32.29	33.38	33.58	11.94	<.001
verb-raising	4.35	7.73	7.50	48.91	<.001

As said, the figures in Table 4.34 referred to the linguistic achievements of the *eldest* Frisian children. Interestingly, quite similar results were obtained when the achievements of the parents were compared with the performance of their *own* children (from grade 5 and 8). The means obtained by these children were nearly identical to those obtained by the eldest Frisian children. This time the average scores came to 10.00 (breaking), 14.38 (diminutive formation), 7.44 (*je*-verb conjugation), 32.23 (lexical knowledge) and 4.12 (verb-raising). It was proved again that the mean scores obtained by the Frisian children on the language tests were significantly lower than those of the fathers and mothers ($p<.001$).

Returning to Table 4.34 we note that on none of the language tests did the mean scores of the two parent groups (fathers and mothers) differ significantly from one another. Broadly speaking, the absence of a gender effect among adults is in agreement with the outcomes of the Frisian children, where we only found a slight effect for gender with the breaking phenomenon, but not with any other linguistic variable. The absence of a gender effect also matches the results of Meekma's study into gender differences in Frisian adults' pronunciation of sandhi phenomena in Frisian (Meekma 1989). As regards the 'Dutchness' of the pronunciation of Frisian, Meekma found no meaningful distinction between Frisian men and women. Likewise, our data did not reveal that females are forerunners in language change.

A relevant question is whether or not the achievements of Frisian children (from grade 5 and 8) and their *own* parents interrelate. In other words, to what extent do Frisian parents model the first language of their children? To inquire into the possible link between the performance of Frisian parents and their own children, the transformed scores of parents and children on the five language tests have been condensed into an index of knowledge of Frisian (*KOF*, see §4.7). The next matrix provides the results of a correlation analysis that has been carried out on the *KOF* index.

Table 4.35: Correlation between KOF scores of fathers, mothers and children

	mothers	children (n=26)
fathers (n=26)	.23	.26
mothers (n=26)	-.-	.40*

From Table 4.35 it can be seen that the *KOF* scores of Frisian fathers and mothers correlate positively (r=.23), but not to a statistically significant degree. The correlation between the scores of Frisian children and their fathers (r=.26) also does not reach a significant level[37]. The interesting thing is however that there is a significant link between scores gained by Frisian children and those of their mothers (r=.40, p<.03). On account of this, we infer that Frisian mothers demonstrably mould their children's mother tongue.

In the foregoing, we found ample evidence that Frisian children generally perform less well than Frisian parents. The children's relative performance is, however, not equally poor on the five distinct linguistic variables. That is exemplified by the table below. The table contains the transformed mean scores of eldest children (grade 8) and the joined group of parents. Note that the variable of diminutive formation is incorporated twice; one time the test includes all (17) items, the other time the test is narrowed down to the seven items where the traditional */ke/* suffix may be supplanted by its Dutchified counterpart */tsje/*.

Table 4.36: Mean transformed scores of eldest Frisian children (n=102) and parents (n=52) on the language tests

	children (C)	parents (P)	P minus C
lexical knowledge	9.50	9.85	.35
je-verb conjugation	8.31	9.21	.90
diminutive formation (17)	8.64	9.56	.92
diminutive formation (7)	7.24	9.01	1.77
breaking	7.16	9.14	1.98
verb-raising	5.55	9.51	3.96

The table reveals that the contrast between the achievements of the children and the performance of parents is comparatively large as regards the diminutive formation of nouns ending in a vowel/diphthong or */r/* (1.77), but also as regards the breaking variable (1.98) and, in particular, verb-raising (3.96).

We will take a closer look at the achievements of the two generations on these three linguistic variables. The next table first exemplifies the diverging scores obtained by (oldest) Frisian children and parents with the formation of the traditional */ke/* suffix. Remember that the maximum score is seven.

[37] The absence of high correlations can be largely attributed to the fact that the Frisian parents show little variability.

Table 4.37: Diminutive formation scores with nouns ending in vowels, diphthongs or /r/ of oldest Frisian children and parents, in numbers (and %)

score	children	(*n*=102)	parents	(*n*=52)
0	2	(2.0)	-	-
1	2	(2.0)	1	(1.9)
2	4	(3.9)	-	-
3	4	(3.9)	-	-
4	18	(17.6)	-	-
5	28	(27.5)	2	(3.8)
6	25	(24.5)	26	(50.0)
7	19	(18.6)	23	(44.2)
mean	7.24		9.01	
sd	2.26		1.34	

From Table 4.37 it can be read that a minor portion (2%) of the (about) twelve-year-old Frisian children does not use the traditional */ke/* suffix at all. Furthermore, twelve children (12%) merely apply this suffix in less than half of the cases (0-3 times). Instead, only about one out of five children (19%) constantly uses */ke/* as diminutive suffix. By contrast, over twice as many of the parents do so, and there is only one Frisian parent who scores lower than five.

We have examined whether there is a development in the use of the */ke/* suffix after the end of primary school. A randomly selected group of Frisian children from grade 8 (*n*=21) was re-tested with a time interval of 4.5 years (see §3.3). A comparison could be made for 6 (out of 7) items where the */ke/* suffix may be replaced by */tsje/* (see Table 4.11)[38]. So the maximum score was 6. The results obtained among the Frisian children tested in 1990 and 1994 were compared to each other. The average scores were 4.38 and 4.86 respectively. A *t*-test (paired samples) revealed that the difference between the means was not statistically significant (*t*=-1.08). In short, the Frisian children showed no statistically significant longitudinal progress.

We believe it is not too hazardous to interpret the figures presented in terms of language change. At the end of elementary school some Frisian children fail to apply */ke/* as suffix or use it hardly at all. Moreover, there is no significant longitudinal progress after the end of primary school. By contrast, studies on Dutch children's acquisition of the Dutch diminutive paradigm suggest that the system is fully settled at the age of twelve at the latest. To put it briefly, it appears that Frisian children's results disclose a delayed or stagnated development of the traditional */ke/* form. Such a delay or stagnation of the acquisition of the traditional diminutive suffix may in the long run lead to a structural change of the language.

[38] It was not possible to include the item *do* (pigeon), as some children (mistakenly) responded in 1990 to the item photo. Note that in 1994 elicitation did not take place by means of pictures, but through an oral sentence completion task.

Tracing the active forces operating in the change is far from easy (see §2.4). Strictly speaking, we tend to endorse the position of De Haan (1990), who argued that the development can be understood basically in terms of an *intralinguistic* change whereby the class of */tsje/* suffixes enlarges at the cost of the */ke/* class. On the other side, we believe that the deeper cause of the replacement of */ke/* by */tsje/* lies in the external pressure of Dutch. In that sense, the displacement fundamentally is a contact phenomenon.

Breaking is another variable where children and parents clearly perform clearly divergently. Schaerlaekens and Gillis (1987:160) concluded that children's basic phonological development in Dutch has been nearly finished after the age of five or so. Moreover, the *Dongeradielster* study cited earlier proved that Frisian children fully implemented the rule at the end of elementary schooling (Boelens 1987b:103). In view of this and taking into consideration that some Frisian children utterly leave out breaking, thereby simplifying the language, we think it is fair to conclude that the generation gap observed signifies a delayed or stagnated language development among many Frisian children.

The following table clarifies our stance. It represents the frequency counts of the breaking variable, both for Frisian children from grade eight and parents. Recall that the maximum sum score was 15.

Table 4.38: Breaking scores of oldest Frisian children and parents, in numbers (and %)

score	children	(*n*=102)	parents	(*n*=52)
0	1	(1.0)	-	-
1	3	(2.9)	-	-
2	1	(1.0)	-	-
3	1	(1.0)	-	-
4	1	(1.0)	-	-
5	4	(3.9)	-	-
6	4	(3.9)	-	-
7	3	(2.9)	-	-
8	4	(3.9)	-	-
9	5	(4.9)	-	-
10	8	(7.8)	2	(3.8)
11	11	(10.8)	1	(1.9)
12	17	(16.7)	5	(9.6)
13	18	(17.6)	12	(23.1)
14	13	(12.7)	18	(34.6)
15	8	(7.8)	14	(26.9)
mean	10.73		13.63	
sd	3.58		1.25	

The table exhibits that none of the parents obtains a sum score lower than ten. Conversely, 27 out of 102 Frisian children from grade eight (26%) do so. Moreover, we find that over a quarter of the parents (27%) consistently break every item, while no more than 8% of the children perform maximally. Once again, these figures convincingly prove the large discrepancy between the performance of the Frisian children from grade eight and the Frisian parent group. This contrast points to a process of *intralinguistic* (phonological) language change. If the change ultimately ends in speakers' total estrangement from the phenomenon, a *simplification* of Frisian's phonology has taken place. It has been stated that, generally speaking, simplification results from insufficient exposure to and use of a language (see §2.4). With an eye to the results obtained, one doubts whether Frisian primary school children, who are fluent bilinguals and used to speaking Dutch in many situations, do use their first language intensively enough to acquire a full knowledge of the opaque and redundant rule of breaking. In this respect, the intralinguistic change is indirectly induced by language contact.

Verb-raising is the third variable where Frisian children and parents perform in clearly different ways. From Table 4.36 it can be seen that the syntactic variable of verb-raising shows by far the greatest intergenerational distinction (P minus C). The contrast between the generations can be further evidenced by the finding that 85% of the Frisian parents obtained the maximum score (of 8) on the test involved, while merely 12% of the oldest Frisian children did so. Interestingly, the parents of one of the Frisian children who scored nil at the verb-raising task were also tested. It turned out that the father responded correctly to seven (out of eight) items, while the mother exclusively produced standard sequences. Thus, it is possible for a Frisian child not to acquire the standard order in the verbal complex even if his parents offer an adequate model[39]. Obviously, the impact of the peer group is a factor which should not be underestimated. All these things correspond to the view expressed by Hockett (1950-449) who wrote that "the most important environmental force shaping the emerging dialect of a child is the speech of other children". Labov (1972:138) took a similar position. He argued that "the child's first language experience, at 2 or 3 years old, is usually dominated by the example of his parents. But from about 4 to 13 years old, his speech pattern is dominated and regulated by that of the preadolescent group with which he plays". This view may partially clarify why the variable of verb-raising shows the greatest intergenerational gap. Given its structural complexity, the syntactic variable will not be acquired in Labov's stage of 'first language experience' where parental primary linguistic data play a prevalent role. Instead, it is acquired later, when the regulative impact of the wider environment (peers) has grown, and just this paves the way for outer influence.

We have examined whether there is a development in verb-raising in Frisian after the end of primary school. A randomly selected group of eldest Frisian children (n=21) has been re-tested with a time interval of 4.5 years (see §3.3). The results obtained among the children in 1990 and 1994 have been compared to each other. A t-test (paired samples) showed that the children did not perform significantly different in both years (t=-1.27). The means obtained were 4.62 and 5.33

[39] This finding has also been personally experienced by the present author.

respectively. In short, the Frisian children showed no significant longitudinal progress.

We contend that this is to be understood as a token of a stagnated language development. In turn, we assume that this points to a (syntactic) *interlinguistic* language change. In our opinion, it is unlikely that the change is internally originated. De Haan (1990:112) rightly remarked that "there is no internal reason why the Frisian verbal complex system should change". Furthermore, the change observed crops up speedily and we stated before that intralinguistic change usually proceeds slowly (see §2.4). In short, we believe that outside influences are at stake. Apparently, what is going on is that Frisian children, who are all massively exposed to Dutch and use the language so frequently, tend to apply Dutch grammar rules during the production of the verbal complex in their first language. In contrast to what De Haan (1990, 1992) posits we consider this a case of syntactic borrowing of part of the rules governing word order in the verbal complex.

The outcomes pertaining to syntax are at variance with the usual conception of syntax being the least easily diffused language sector (see §2.5). Dialectological studies in the Dutch language area have convincingly shown that syntax is one of the most resistant domains of Dutch dialects (cf. De Schutter, Gerritsen and Van Bree 1990:8). Van Bree (1990) rationalises the solidity of syntax by referring to several characteristics of syntactic structures: they are relatively abstract, frequent and unconscious. However, he also states that not all syntactic phenomena should be regarded as equally stable. Word order in particularly might be less solid, perhaps because of its salience. This remark seems highly relevant, as our syntactic task deals with word order.

Syntactic variables are also said to be comparatively stable, because they are strongly encapsulated in the language structure. This structural embeddedness may, on the one hand, prevent swift syntactic language changes. But on the other hand, it may also be the case that, for one reason or another, once a particular syntactic phenomenon is moving, the change suddenly gathers pace. This would be understandable precisely because of the firm embeddedness of the phenomenona involved. In short, there may be a kind of 'threshold level' operating in syntactic language change. A given threshold level may be passed only by a certain (high) degree of language contact. Once it is passed, the change proceeds speedily.

In the case of Frisian children's verb-raising, this is evidently what has happened. Bit by bit, the change already started most probably in the current generation of parents. This is confirmed by a study carried out by Eising and associates (1981). They proved that the intermediate generation (30-50 *yrs*) incorporated in their study produced non-standard verb orders in 6% of all possible cases, while the oldest Frisian subjects (60^{+}) produced no non-standard verb orders at all (Eising et al. 1981). Our parental language data show strikingly parallel results. On the basis of our data we calculated namely that 5% of the responses of the parent group (20/416) were not in accordance with the standard. All in all, the finding that Frisian children perform poorly on verb-raising whilst their parents perform well, indicates, in our contention, that the threshold level has been passed. Evidently, language contact has taken place to such extent that the mostly stable domain of syntax has been affected.

4.9 Knowledge of Frisian and oral use of Frisian by Dutch children

In this section, we examine the link between Dutch children's knowledge of structural aspects of Frisian as described in the preceding sections and their ability to use the language orally. The concrete question guiding the section is how well Dutch children who obtain relatively high *KOF* scores are capable of using the language in an oral speech task.

Earlier we stated that taking one standard deviation below the mean *KOF* score of Frisian children as norm for Dutch children, there are 20 Dutch children who score beyond this standard (see §4.7). Of these, 16 were pupils from grade eight, and four of them were younger Dutch children (grade 5). One might assume that the Dutch children who have a relatively fair structural knowledge of Frisian, are able to use that language orally. Within the framework of the project *Language Assessment in Friesland* (see §1.4), data have been gathered about Dutch children's actual speaking skills in Frisian (cf. De Jong and Riemersma 1994:115-125). First, the children were asked to estimate their own proficiency in speaking the second language. Furthermore, they completed a speech task whereby they freely told something amusing or exciting in Frisian.

These data on self-estimated and recorded speaking ability in Frisian allow us to go briefly into the Frisian speaking ability of the said 16 Dutch children from grade eight. The next table lists the *KOF* scores obtained and it gives their self-estimated speaking skills. Recall again that the 16 Dutch children selected belong to the 'top 20' as regards knowledge of Frisian.

Table 4.39: KOF scores and self-estimated speaking ability of 16 Dutch children

KOF	estimated ability	name[40]
30.93	reasonable	Peter
31.56	good	-
31.80	good	-
32.12	reasonable	-
32.51	*with difficulty*	Natascha
32.86	reasonable	-
34.43	good	-
34.70	reasonable	-
35.08	reasonable	-
35.88	*very easy*	Carlijn
35.98	reasonable	-
36.19	good	-
37.39	reasonable	-
37.74	good	-
38.12	reasonable	-
44.01	reasonable	Yvonne

[40] The names of the children are fictitious.

The table shows that the range of *KOF* scores is between 31 and 44. Moreover, of the Dutch children with relative high scores on knowledge of Frisian, one child thinks he can speak Frisian *with difficulty* (Natascha), whereas another child feels he can speak Frisian *very easily* (Carlijn). The others are of the opinion that they can speak Frisian reasonably well or are good at it.

It is not possible to infer on the basis of the table above whether or not the *KOF* scores obtained and the self-estimation of Frisian speaking ability are associated; the number of children is too small for that. To trace this relationship, the self-estimated speaking ability has been correlated with the *KOF* scores for *all* Dutch children (n=207). The correlation arrived at proved significant (r=.44, p<.001). This means that Dutch children's self-estimated speaking ability in Frisian is generally related to their scores on the index of knowledge of Frisian.

To gain some insight into the level at which Dutch children actually are able to use Frisian orally and the manner in which they do it, the audio-recordings of the afore-mentioned speech tasks of four Dutch children have been transcribed. These are the ones with the highest and lowest *KOF* scores (Yvonne and Peter) and those with the most positive and negative self-estimations (Carlijn and Natascha).

The recordings of the speech task are fully transcribed so as to give a realistic impression of the speaking ability. The analysis of the recordings is not exhaustive, since we confine ourselves to the most conspicious features found. To start with, the full transcript of the speech task of Peter is listed below. Note that he had the lowest *KOF* score (31).

Peter

1	P:	eh yn 'e fekânsje eh ha'k nei Ameland west dêr ha'k
2		eh op it strân west eh wy ha in hûske flak *by* it
3		strân eh en in dei letter giene wy nei in museum
4	exp:	wat foar museum
5	P:	eh dat *wyt* ik net mear eh *beeldjes en schelpen of zo*
6		*zoiets* eh en dêr ha'k dus sjoen en toen bin we nei
7		Nes west bin we nei in restaurant west en dêr ha we
8		wat iten en toen bin we wer nei hûs ta *gean* en toen
9		wie der in eh in plysjeman dy dy sit by ús op scou-
10		ting padvinderij 'k sit op eh padvinderij en *die was*
11		*daar ook* dy wie dêr ek eh mei de auto en dy kaam ik
12		toen tsjin en toen *gean* wy nei hú.. en toen *go*.. wy
13		wer nei hûs ta

Perusing the transcript above reveals a number of interesting features of this Dutch child's Frisian speech. First, it appears that the child displays certain local Wood-Frisian phonological characteristics. This is in accordance with the area where this child lives: the village of *Damwâld*. Line 2 contains the wood-Frisian *by* (instead of the clay-Frisian *bij*) and in line 5 we find the wood-Frisian *wyt* (clay-Frisian: *wit*; cf. Hof 1933:52).

Second, the transcript includes two Dutch stretches of speech. Lines 5-6

contain Dutch *beeldjes en schelpen of zo zoiets* (ornaments and shells or some such) and lines 10-11 include *die was daar ook* (who was there as well). The latter example is immediately corrected in Frisian: *dy wie dêr ek* (line 11).

Third, we observe that Peter has trouble with Frisian verb conjugation. In line 8, the infinitive of *gean* (to go) is used instead of the perfect participle *gien*. A similar phenomenon is found in line 12, where the infinitive is used instead of the past tense. This time, the original *gean* is followed by an incomplete self-correction: *go...*

Next, we examine the speech sample of Natascha, who evaluates her Frisian speaking ability being low (*with difficulty*, see Table 4.39). The transcript illustrates that she does indeed find substantial difficulties when speaking Frisian.

Natascha

1	exp:	dus dyn omke en tante wiene werom út Yndonesië en
2		dêr ha jim hinne west
3	N:	ja
4	exp:	en toen
5	N:	no toen ha'k dit krigen
6	exp:	oh wat leuk moaie earmbân
7	N:	ja komt uit út eh Indonesië dus
8	exp:	ja
9	N:	út <>
10	exp:	soa
11	N:	en eh no en se hadden eh sij sijde en stoffen en so
12		en allemaal dingen ha se *meenôm meinôm* en eh no en
13		eh toen had se dus in eh in ketting ha se voor mijn
14		foar myn sus meinom en eh toen wa sy wou dus ek sa'n
15		eh earmban*tsje* as my en eh ha't se'm *hoe zeg je*
16		ruile rûl rû...
17	exp:	ruilje gewoan
18	N:	ruilje foar ek sa'n armba ea earmbantsje
19	exp:	ja
20	N:	en eh toen *ha* se dy ketting oan mefrou Doornbos *jaan*
21		en *dy wennet* tsjinoer myn eh *oma* eh beppe en eh toen
22		gingen wij 's avonds gongen wy *weer terug* nei eh
23		Beetsterzwaag en eh *saterdei (ss)snein of sneon*
24	exp:	ja
25	N:	sneon bin ik nei de eh film ta weest west
26	exp:	wat foar film hast dan west
27	N:	Look who's talking
28	exp:	oh mei in fryndin
29	N:	nee mei myn sus
30	exp:	oh mei dyn sus
31	N:	ja

32 exp: dy sit net by dy yn de klas
33 N: nee dy sit in 'e de tredde klas fan 'e *ho hegere*
34 skoalle
35 exp: leuke film
36 N: ja heel leuk *ging over* eh gong over een man of eh
37 jonge lyts jon*kje* dy kwam dus uit eh dy kwaam eh dy
38 werd eh geboaren en eh na praatte die steeds zo en
39 zo heel maf in zichzelf praatte die dan was wel leuk
40 exp: hm hm
41 N: *nou en op het laatst krijgt die nog een zusje*
42 exp: yn it Frysk
43 N: op in sus*je* in (ss)sus*ke* 't lêst krege kreeg ie noch
44 in suske en toen eh sei dat suske dat sei dus eh fan
45 eh 'wot ik vandaag *ha meemakke*' en eh *dat was wel*
46 *leuk*
47 exp: en wiene jim let thús
48 N: hm
49 exp: let thús
50 N: no eh negen eh *hoe zeg je dat*
51 exp: njoggen
52 N: om nj*o*ggen *oer* en eh toen *ha* we noch nei
53 de televysje *keken* <> 's mooi maar ik ging elke gong
54 elke dag eh om *twaalf uur* tolve oere nei bed dus
55 exp: do bist nou sa min as in koekje
56 N: ja
57 exp: hoe let wie it justerjûn dan
58 N: justerjûn eh kwart voor tw kwart voor elf
59 exp: oh ja
60 N: kertier foar *alve*
61 exp: ja ja ja
62 N: ja was wel leuk
63 exp: en wat hast juster dien
64 N: *tsjuster* eh tsjuster waren wy eh by by myn beppe
65 exp: oh ja
66 N: en eh *nou verder niet*

<>: not audible

Anew, the transcript includes several completely Dutch stretches of speech. Line 41 is even entirely in Dutch: *nou en op het laatst krijgt die nog een zusje* (well and then he got another baby-sister in the end). However, the inclusion of Dutch elements is often also restricted to a few Dutch words. This is, for example, the case in line 22 where Dutch *weer terug* (back again) is used instead of Frisian *wer werom*. Sometimes, Dutch fragments have the function of 'meta-communication'. Lines 15 and 50, for instance, contain the question *hoe zeg je (dat)* (how do you say (that)). Similarly, a Dutch comment is made in lines 45-46: *dat was wel leuk* (that was a bit funny). The last line (66), finally, also contains a form of meta-communication in Dutch: the child closes the session saying *nou verder niet* (no further).

The transcript also shows many self-corrections. A minimal self-correction is found in line 33, where Dutch *ho(gere)* (higher) is corrected in *hegere*. Similarly, *meenôm* (line 12) is corrected in *meinôm* (taken with) (however, compare *meemakke* in line 45 which remains uncorrected). An example of lexical correction is in line 21, where Dutch *oma* (grandmother) is corrected by its Frisian equivalent *beppe*. Another instance of lexical correction is in line 54. Here, Dutch *twaalf uur* (twelve o'clock) is replaced by Frisian *tolve oere*. Not all 'corrections' lead to proper Frisian. Line 36 contains an example of a faulty correction: Dutch *ging over* (dealt with) is replaced by *gong over*, while the equivalent of the Dutch preposition *over* is *oer* in Frisian.

Moreover, not all incorrect Frisian words are actually corrected. In line 60 we see the quantitative adjective *alve* (eleven) which is uttered according to its Dutch equivalent *elf*, while in Frisian */n/* is added (*alven*). Comparably, *oer* (hour) (line 52) is not corrected, although the schwa (*oere*) is erroneously deleted. This reminds us of the test on lexical knowledge of Frisian, where schwa-deletion occurred several times among Dutch children (see §4.5). Another example of an uncorrected fault can be found in line 64. Here, the Frisian word *tsjuster* (meaning 'dark') is used instead of *juster* (yesterday), even though the right word had been used by the experimenter in the previous line (63). May be the experimenters use of '*hast juster*' has triggered the faulty *tsjuster* by merging both words (*hastjuster*).

In line 23 we see that Natascha first uses the local Wood-Frisian variant *saterdei* (Saturday), then replaces this by standard Frisian *(ss)snein* (Sunday), which is then again corrected in standard Frisian *sneon* (Saturday).

The transcript contains two instances where the perfect participle is faultily formed. In line 20, Natascha uses *ha jaan* (have given) instead of *ha jûn*. In this case, the infinitive is applied. A comparable error is made in line 52-53, where *ha keken* (have seen) is used instead of *ha sjoen*. *Keken* might be viewed as a somewhat Frisianised form of the Dutch perfect participle *gekeken*, for the Dutch prefix */ge/* is indeed not applied in Frisian.

A syntactic error is found in line 45. The Dutch verb order used here (*ha meemakke*) (have went through) should be *meimakke ha* in standard Frisian.

Furthermore, a minimal phonological error is made in *njoggen* (nine) (line 52) which is pronunciated as *njòggen*. Apparently, the model of the experimenter's pronunciation in the previous line has even failed here, which underlines the level of difficulty of the very distinction.

Interesting, the sample also contains some cases of diminutive formation and *je*-verb conjugation. As regards diminutive formation, we find correct forms in line 15 (*earmbantsje*-little bracelet) and 37 (*jonkje*-little boy). Line 43 contains a self-correction; *susje* (little sister) is corrected into *suske*. The original *susje* can be the Dutch form, but it may also be the case that it was meant as Frisian word. A correct application of a *je*-verb conjugation rule is found in line 21. Here, the conjugation of the *je*-verb *wenje* (to live) is properly realised in *dy wennet* (3rd singular).

In addition, we take a look at the recordings of Carlijn, who claims to speak Frisian *very easily* (see Table 4.39). Compared to the previous Dutch child (Natascha), Carlijn does indeed speak Frisian smoothly. We observe, for instance, fewer self-corrections and fewer insertions of Dutch fragments.

1	C:	ja maar ik *weet* ni.. ik wyt niks
2	exp:	wist hielendal niks
3	C:	nee
4	exp:	meist noch wol even tinke, do meist wol wat op-
5		skriuwe hjirre miskien kinst dêr wat oer fertelle
6		hielendal niks noch
7	C:	nee
8	exp:	no fan 'e moarn sietst sa te laitsjen mei dyn fryn-
9		din ik tink fan
10	C:	ja mar dat wie oer hele oare dingen wat sy allegear
11		sei
12	exp:	no en wat foar grappichs wie dêr dan
13	C:	wy sieten wy hiene in kop*ke afwasmiddel* hiene wy yn
14		it wetter driuwen en sa dat wie krekt gel
15	exp:	krekt gel
16	C:	ja toen moesten we sa laitsje en ik hie alle skjinne
17		dingen hie'k eryn *dûng* want dy wie wol skjin mar 'k
18		woe folle langer ôfwaskje
19	exp:	oh dat diest mei opset
20	C:	ja dus dêrom moesten wy sa laitsje
21	exp:	ja presys en bist wolris faker an eh grappen úthel-
22		jen mei dyn fryndin of net
23	C:	eh *bijna* elke dei wol
24	exp:	hjir op skoalle
25	C:	ja
26	exp:	ja en ek wolris mei de meester <>
27	C:	ja
28	exp:	no kinst dêr wat oer fertelle
29	C:	nee
30	exp:	<> yn 'e klasse of sa
31	C:	ja <> laitsjen
32	exp:	ja wat dochst dan
33	C:	nou dan seit meester <> dan sees ik der wat troch-
34		hinne tsjin Nikolien of sa myn fryndin en dan eh no
35		ja dan *mut* dy sa laitsje altiten
36	exp:	wat seisto dan
37	C:	no ja gewoan as wy it erges oer ha
38	exp:	as jim it erges oer he
39	C:	ja ik kin gjin foarbeeld mar
40	exp:	wytst net mear
41	C:	nee
42	exp:	nee en eh even tinke hear in sport dochst dat ek
43	C:	ja tennis en ponyriden
44	exp:	nou ponyriden hiest it al oer net oer hynders
45	C:	ja
46	exp:	ja no dêr hest fast wol wat grappichs mei meimakke

47	C:	no nee
48	exp:	nee noait wat raars meimakke mei dyn pony
49	C:	mei myn pony wol
50	exp:	no
51	C:	no se wie in kear toen *stûng* se even bij *iemand* oars
52		nou dy man wêr't se *stie* dy hie even in pear oare
53		hynders op stâl dat wie allegear <> merry en toen
54		wie se oer *it hek* oer de hekke hinne sprong fan de
55		*wei* en toen wie se nei de stâl ta rûn
56	exp:	dy pony
57	C:	ja
58	exp:	sa helendal allinnich
59	C:	ja
60	exp:	en wat gebeurde der toen
61	C:	no se wie gewoan oer *it hekke* hinne sprong en <>
62		snel oer de snelwei hinne
63	exp:	so gefaarlik ek noch dus falt wol mei
64	C:	ja
65	exp:	ja
66	C:	at se yn galop giet wol
67	exp:	oh se gong yn galop gong se oer de snelwei
68	C:	ja
69	exp:	is dy pony fan dyself
70	C:	nee no ja en nee
71	exp:	ja en nee, de helte
72	C:	ja
73	exp:	en eh hoe'n swembad he jim hjir yn Joure hest dêr
74		wolris wat grappichs meimakke
75	C:	ja mei myn fryndin dat is altyd lol
76	exp:	dat is altyd lol no fertel dêr ris wat oer
77	C:	oh ja har nicht wie hjir in kear yn 't swembad en
78		toen seach se in leuke jonge en dêr woe se wol
79		graach ferkering mei <> hiene wy alles *regele* al-
80		linne har fryndin <> nicht dy doarde *steeds* net en
81		wy *trekten* dy jonge steeds mei <> op it lêst wie se
82		toch noch hie se ferkearing
83	exp:	<> dy wurde sa mar ferliefd
84	C:	ja
85	exp:	dat is maklik en fûnst it wol leuk of net
86	C:	ja dat wie echt laitsjen *inderdaad* myn fryndin dy
87		skamme sich dea foar ús
88	exp:	wie
89	C:	ik bedoel dy eh myn nicht
90	exp:	oh ja en dy jonge <> dat wat
91	C:	ja dy fûn it net leuk dat wy him de hele tiid oeral
92		mei hinne sleepten
93	exp:	nee presys dus hest altyd lol mei dyn fryndin

94	C:	ja altyd wol ja
95	exp:	sit dy ek by dy yn 'e klasse of net
96	C:	ja
97	exp:	bist altyd by
98	C:	ja
99	exp:	eh no witsto yts aardichs te fertellen
100	C:	nee
101	exp:	niks mear no moatsto ris my ris fertelle watsto sa
102		aardich fûnst an no an dat lêste ferhaal fan dy fan
103		dy nicht fan fûnst dêr no it alleraardichste an
104	C:	no dat wy sa'n lol hienen
105	exp:	<> lol
106	C:	nou omdat dy dy nicht fan my dy skamme sich dea <>
107		en dy wurdt helendal read en sa en dêrom fûn ik it
108		sa leuk
109	exp:	dat fûnsto it leukste <> dat sy har eh deaskamme
110	C:	ja en wy hiene self ek hartstikkene l.. hele tiid
111		dûbel
112	exp:	en eh hest dit wolris faker dien yts grappich yts
113		fertelle oer yts grappichs of spannends
114	C:	ja
115	exp:	jawol an wy dan
116	C:	oan Nikolien
117	exp:	ja dat tocht ik al an dyn fryndin natuerlik ja do
118		dochst seker net oars
119	C:	nee
120	exp:	nee mar ek wol oan oaren of net
121	C:	eh ja oan myn *susje* wol Koosje

<>: not audible

First, we see a self-correction in the first line, where Dutch *weet* ((I) know) is corrected by *wyt*. A faulty 'correction' is found in line 54. Here, *it hek* (the fence) is replaced by *de hekke*. Proper Frisian forms would be *it hek*, *it stek* or *de hikke* (Visser 1985:275), but note that line 61 contains the hybrid *it hekke*.

Moreover, the foregoing transcript reveals several *Súdwesthoek* Frisian variants (see §1.1). In line 17, we find the past participle *dûng* (done) where standard Frisian has *dien*. Relatedly, line 51 contains *stûng* (stood), where standard Frisian has *stie*. Remarkably, this standard form is encountered in the following line (52). A *Súdwesthoek* variant is also realised in line 35: *mut* (must) is used instead of standard Frisian *moat*. We also observe some typical Dutch words, see next page.

Note that Dutch *trekten* (past tense to pull) is an overgeneralised form as the conjugation of this verb is irregular (*trokken*).

Unlike the previous two Dutch children (Peter and Natascha), Carlijn does not insert larger Dutch speech fragments. Worth mentioning is also the use of *susje* (little sister) in the last line (121). Standard Frisian has *suske*. Most likely, this

is a lexical interference of Dutch into Frisian and not a wrong suffixation. A correct application of a *je*-verb conjugation rule can be found in line 79. Here, the conjugation of the *je*-verb *regelje* (to arrange) is properly effected in *hiene wy (alles) regele* (past participle). Finally, in line 13 we see that the noun *kop* (cup) selects the right diminutive suffix in *kopke*.

line	Dutch	Frisian	English
13	afwasmiddel	ôfwaskmiddel	washing-up liquid
23	bijna	hast	almost
51	iemand	immen/in oar	someone
55	wei	greide	meadow
80	steeds	hieltyd	always
81	*trekten*	lutsen	(we) pulled
86	inderdaad	yndie	indeed

The last transcript which we consider is derived from the sample of Yvonne, the Dutch child who obtained the highest *KOF* score (see Table 4.39). The next transcript indicates that she does find it hard to speak Frisian.

Yvonne

1	exp:	kinst dêr ris oer fertelle
2	Y:	eh ja no ik wie in kear wie ik *by* myn eh fryn-
3		din te *boa*rtsjen en eh har *buo*rman dy hat
4		eh fan dy lytse keeshûn*tsjes* en dy wolle dy altyd by
5		de pipen pakke mar toen siet der wetter yn de sleat
6		en eh ha se in tún en dan wie dêr sa de reed en dan
7		siet der in sleat tus.. tusken en eh no toen soe dat
8		hûn*tsje* dat soe troch de sleat hinne mar yn de sleat
9		siet wetter dus toen fleach hy yn 't wetter moest ik
10		wol laitsje fûn'k wol lollich
11	exp:	ja no wie der noch mear gebeurd
12	Y:	nee no toen bin'k dus de wei opgong bin'k nei hûs
13		ta gong mar dat wie net sa lang
14	exp:	nee kinst ek noch wat oars fertelle
15	Y:	ja wy wiene in kear*tsje* te hynderriden en eh no toen
16		eh moes'k in hynder eh droechstappe en toen kwaam
17		der in oar hynder dat *kwaam* yn g.. kaam yn galop dat
18		siet eh achter de kealt*sjes* oan en <> fleach eh
19		krekt by my de.. by my del en eh wie'k in bytsje
20		bang foar dus ik *ron* wat nei *foa*ren ta mar toen
21		moest je dat *paard* eh dat hynder dat ik eh *dreech*
22		stappe soe dat moest ik dus ek noch beethâlde mar
23		toen *ron* ik dêr in bytsje foar want dat hie ik net
24		mear troch en toen foel ik en toen eh galoppearde

25		dat oare hynder dat eh dat achter dy kealtsjes oan
26		siet dat eh hat oer my hinne ga.. galoppeard <> *eng*
27	exp:	oer dy hinne
28	Y:	ja
29	exp:	oe jakkes dat wie wol *eng*
30	Y:	ja no en siet der in eh in eh hoefôfdruk siet op 'e
31		earm mar ik wie gelukkich net dea
32	exp:	wiest ek gewond of sa of eh
33	Y:	na eh skaafplak en fierder de *af*druk noch de ôfdruk
34		mar
35	exp:	en dat is letter fuortgong
36	Y:	ja kinst it no noch in bytsje sjen mar 't is eh in
37		hieleboel is fuortgong
38	exp:	oh dus dat wie wol spannend
39	Y:	ja
40	exp:	ja no en kinst ek noch wat fertelle noch wat oars
41	Y:	eh nee 'k soe 't net witte
42	exp:	nee
43	Y:	nee
44	exp:	jim gon saterdei ek nei radio Fryslân
45	Y:	ja
46	exp:	kinst dêr ek wat oer fertelle
47	Y:	no dan moatte wy nei Gribus ta en moatte wy nei eh
48		nei in jazz in jazzprogram en eh moatte wy in *liet-*
49		*sje* sjonge fers*ke* en dan ha wy in yell makke en dat
50		moatst dan eh moatst dan sjonge dêr en no ja moatst ek
51		wy ha it ûnderwerp eh tekenjen en skilderjen hân dan
52		moatte wy dêr eh begjint eh Sippie Tigchelaar dy eh
53		begjint der dan in gesprek oer of sa en dan eh
54		ynienen s.. sit se dan mei de mikrofoan foar dyn
55		noas no moatst net skrikke moatst gewoan trochprate
56		want dogge se dan fine se it allinnich mar moai dan
57		gean se noch mear eh fragen en sa

<>: not audible

Yvonne, who lives in the village of *Twizel* (Wood-Frisian region) displays various Wood-Frisian phonological characteristics. In line 2, she uses for example the Wood-Frisian variant *by* (at). Moreover, line 3 includes the palatalised *boartsjen* (to play) and *buorman* (neighbour). Palatalisation is characteristic for the Wood-Frisian area (cf. Fokkema and Spahr van der Hoek 1967:76-79). Further on, in line 20, we find another instance of palatalisation in *foaren* (forward). Moreover, in lines 20 and 23 we see the Wood- Frisian variant of standard Frisian *rûn* (past tense to run) in *ron*.

Yvonne corrects herself four times. The first self-correction is located in line 17. Here, she corrects the Dutch-inspired *kwaam* (came; Dutch: kwam) into *kaam*. In the previous line (16), the same error probably had not been monitored. Another self-correction is found in line 21. Here, Dutch *paard* (horse) is replaced

by *hynder*. Besides, it can be noted that the same word was also incorporated in the lexical test, and she responded well on this particular item. The third self-correction is a phonological one. We find it in line 33, where Dutch *afdruk* (imprint) is corrected into *ôfdruk*. Remarkably, the appropriate pronunciation was heard just before, in line 30. The final self-correction leads to a hypercorrection. In lines 48-49 *lietsje* (small song), with a Dutch-inspired shortened pronunciation of the */ie/* diphthong, is followed by *ferske*. Note that the initially used *lietsje* was not faulty at all. We notice that the diminutives of both words, *lietsje* and *ferske*, are well formed. This is also the case with *keeshûntsjes* (little keeshond) (4th line), *hûntsje* (little dog) (8th line) and *kealtsjes* (little calf) (lines 18 and 25). However, diminutive formation is not always according to the rules: *kear* (time) selects */tsje/* instead of standard */ke/* in *keartsje* (line 15).

An interesting error is made in line 21-22. Instead of *droechstappe* (to cool), the hybrid *dreechstappe* is used, whereas the infinitive of the same verb had been correctly used just before, in line 16. Note that the meaning of *droech* (dry) is totally different from *dreech* (difficult).

Finally, Dutch *eng* (scary) is used in line 26 and the experimenter takes up the same word in 29.

Having briefly discussed the transcripts, we can now summarise the main non-standard features of these Dutch children's Frisian speech samples as follows:

Use of local dialectal (phonological) characteristics.
This underscores the view that Frisian as second language is picked up by Dutch children through exposure to the language in their immediate environment.
Insertion of Dutch words or Dutch stretches of speech.
The former indicates that the Dutch children have considerable lexical gaps in their Frisian lexicon. The latter can have a meta-communicative function.
Self-corrections.
These often signal linguistic insecurity.
Individual variability of forms.
This indicates that certain forms have not yet been truly settled.
Errors at the phonological, lexical, morphological and syntactic level.

All in all, on account of the transcripts of these speech samples we are inclined to assert that none of the four Dutch children selected is able to speak Frisian accurately and/or fluently. They produce a kind of interlanguage. Natascha, who claims to speak Frisian *with difficulty*, forms perhaps the clearest example hereof. We conclude that a *KOF* score that comes up to the mark in theory, is not a sufficient condition for the ability to speak Frisian in a native-like manner. In all probability, this doesn't bode well for the speaking skills of the other Dutch children who gained (much) lower scores on the index of knowledge of Frisian.

All this is in concordance with outcomes obtained in the research project *Taalpeiling yn Fryslân* (see §1.4). The *Taalpeiling* revealed that Dutch children's communicative speaking ability in Frisian was limited and the quality of their spoken Frisian was judged as poor[41] (De Jong and Riemersma 1994:119-125).

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[41] Dutch children obtained a low mean score of 3.68 on a ten-point scale on the quality of spoken Frisian, whereas Frisian children's mean score on that scale came to 7.13. The difference between these means was highly significant ($F=301.48$, $p<.001$).

4.10 Summary and conclusions

The final section of this chapter broadly outlines the results reported in the preceding sections, and a number of general conclusions are drawn. We emphasise once more that this chapter centres predominantly around Frisian children's linguistic achievements, as does this section.

First, we saw that Frisian children generally performed quite well on the lexical test. Even so, various Dutch loan words, especially nouns, were used. The latter is unsurprising, given the close affinity between Frisian and Dutch and the high degree of language contact. Frisian children also performed fairly well on the morphological tasks measuring diminutive formation and *je*-verb conjugation, although the use of the Frisian *-ke/* diminutive suffix was diminished. Moreover, the responses on the morphological tests showed overt signs of linguistic insecurity, expressed in the form of self-corrections (diminutive formation) and uncertainty about verb class membership. These manifestations of linguistic insecurity disclose that before the end of primary school the morphological skills concerned have not been firmly settled. Furthermore, it was found that Frisian children clearly performed less well as regards the phonological rule of breaking and the syntactic rule of verb-raising in particular. We observed a good deal of flux in Frisian children's scores on these two linguistic variables; the standard deviations of their scores even exceeded the spread of scores among Dutch children. This contrasts with the common notion that variation in second language acquisition exceeds that in acquisition of the mother tongue (cf. Wong-Fillmore 1991:61). The huge linguistic heterogeneity perceived in breaking and verb-raising underlines the looseness of the rules involved. It is also indicative of language change.

In the analyses of variance performed, knowledge of Frisian as first language was constantly related to the age of Frisian children, and to their gender and language environment. The next table summarises the outcomes.

Table 4.40: Main and interaction effects among Frisian children

factor	breaking	diminutive formation	*je*-verb conjugation	lexical knowledge	verb raising	KOF
age (AG)	+	+	+	+	+	+
gender (GE)	+	-	-	-	-	-
lang. env. (LE)	-	+	-	-	-	-
AG × GE	-	-	+	-	-	-
AG × LE	-	-	-	-	-	-
GE × LE	-	-	-	-	-	-
AG × GE × LE	-	-	-	-	-	-

From the table we derive that age (*AG*) proved influential to the achievements of Frisian children with every linguistic variable studied. Age is also the only variable which relates to the index of knowledge of Frisian (*KOF*). In short, Frisian children perform consistently better as they grow older. Thus, a further decline of their first language under the prolonged influence of Dutch was not

observed. A positive effect of age was most conclusively noted for the phenomenon of breaking. But apart from that, this variable just showed a delayed or stagnated development. Breaking was also the sole variable where gender (*GE*) emerged as discriminating factor. It appeared that Frisian girls excelled over boys. In this respect, only the outcomes on breaking correspond to the general notion of females enjoying a rate advantage in first language acquisition (cf. Larsen-Freeman and Long 1991:204).

A striking result was that we scarcely came across any impact of the linguistic composition of Frisian children's language environment (*LE*). We found only a small effect of language environment with the variable of diminutive formation, but none of the other linguistic variables explicitly related to this contextual factor. This is in line with recent findings reported by De Jong and Riemersma (1994:121), who found that quality judgements of spoken Frisian were not related to the factor language environment among the Frisian children.

In the most submersive language environment (A), Frisian children will generally not use their first language intensively outside of the home, and they are massively exposed to Dutch in the peer group. In short, as far as this language environment is concerned, one can speak of diminished input and use conditions. Yet, this seems not to undermine the structural integrity of Frisian to a higher degree than in less submersive environments (B and C).

The absence of a clear effect of language environment is unexpected. It is also unlike findings reported in other research. For instance, Pfaff (1991:123-24) observed among Turkish children in Berlin, that their first language was more subject to attrition for those children who had more contact with German.

The absence of an effect of language environment is open to different explanations. On the one hand, it might mean that the children's first language has been rooted within the family to such an extent that the broader submersive (peer group) environment has no eroding impact on the early home-based linguistic foundation. On the other hand, and in our view this is a preferable interpretation, the absence of an environment effect may denote that the 'wider linguistic milieu' in which Frisian children find themselves is so far-reaching that the more narrowly defined factor of language environment does not discriminate any further. As regards the wider linguistic milieu one can, for instance, think of Dutch mass media, which reach every Frisian-speaking family no matter where they live. One can also think of the impact of written Dutch, which is omnipresent.

Interestingly, we noticed substantial intergenerational differences as to the command of Frisian as first language. It showed up that many Frisian parents tend to have a keen interest in the correctness of their children's use of Frisian, a finding which questions Hoppenbrouwers' proposition of presentday parents being linguistically indifferent (Hoppenbrouwers 1990). The results show that Frisian parents perform significantly better than the eldest Frisian children at all linguistic variables investigated, but particularly at the application of the Frisian */ke/* diminutive suffix and at the rules of breaking and verb-raising. Especially with the latter two variables we ascertained a relatively wide degree of variability in Frisian children's achievements. We admit that there is no way of positively separating true language change from cases of linguistic variation. As Aitchison (1991:90) recently put it: "all change involves variation, but variation can exist without change". As to the intergroup comparison between the achievements of

parents and oldest children it is also acknowledged that there is a possible interference from age-grading, for it is not entirely precluded that twelve-year-old Frisian children still show some linguistic growth. Nevertheless, we posit that the intergenerational findings as to the variables of diminutive formation (*/ke/ <> /tsje/* replacement), breaking and (specially) verb-raising attest to a process of language change that is going on.

As to the phenomenon of breaking we essentially witness a tendency towards phonological *simplification*. This trend probably results from insufficient use of and exposure to the language which, in turn, relates to the current Frisian-Dutch contact situation in the province. In our contention, the outcomes about verb-raising disclose a process of *interlinguistic* change. This relatively recent change is in the realm of syntax, a linguistic domain which has commonly been placed at the bottom of a hierarchy of borrowing (cf. Romaine 1989:63, see §2.5). We think that many Frisian children use the Dutch verb order when producing the verbal complex in Frisian. The obvious reason behind this is that the present generation of Frisian youngsters is very intensely confronted with Dutch, both orally and in writing. This case of syntactic borrowing exemplifies a subtractive influence of Dutch, for Frisian children acquire Dutch at the cost of their first language. As regards the use of the Frisian */ke/* diminutive suffix we take the view that, strictly speaking, it involves an *intralinguistic* change, of which the deeper cause lies in the outer influence of Dutch.

The said linguistic changes, breaking, verb-raising and */ke/ <> /tsje/* replacement, differ not only in type of change. They also differ from a temporal point of view. As far as that is concerned, we contend that the loss of breaking in diminutives and plurals and the loss of the traditional */ke/* suffix probably constitute longer-lasting tendencies, which are accelerated in the current generation of children. Dutchified verb-raising, by contrast, most likely merely started bit by bit in the present generation of parents, and suddenly became a common phenomenon among current youngsters.

The correlations between the correct percentages of the test items about breaking, diminutive formation and lexical knowledge for Frisian and Dutch children were constantly high (viz. .72, .84 and .73). Moreover, the correlations between the correct percentages of the items concerning *je*-verb conjugation and verb-raising for Frisian and Dutch children were also positive (.54 and .87 respectively). To put it another way, the order of the test items concerned is consistently quite similar for both groups of children. That is an interesting finding, for it means that frequency patterns of first and second language acquisition evidently appear to be more or less identical[42].

But there are also differences in patterns of first and second language acquisition. This can be seen from the next table, which gives an overview of the means and standard deviations of the transformed scores obtained by Frisian and Dutch children on the linguistic variables[43]. It should be noted that diminutive formation is incorporated twice; one time the test includes all (17) items, the

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[42] That is also evidenced from the fact that the reliability of every language test was improved when the groups of Frisian and Dutch children were combined.

[43] The test scores have been transformed to 11-point scales (ranging from 0 to 10).

other time the test is narrowed down to the seven items where the */ke/* suffix may be replaced by the Dutchified */tsje/*.

Table 4.41: Mean transformed scores (and standard deviations) of Frisian and Dutch children on the language tests

	Frisian (*n*=202)		Dutch (*n*=208)	
	mean	*sd*	mean	*sd*
verb-raising	5.13	2.66	3.91	2.36
breaking	6.38	2.71	1.75	1.93
dim. formation (7)	6.91	2.66	4.09	3.08
je-verb conjugation	7.71	1.82	4.90	2.12
dim. formation (17)	8.40	1.24	5.18	2.30
lex. knowledge	9.38	.61	5.36	2.52

Table 4.41 reveals that there is a link between the level of the transformed scores and the spread of the scores (*sd*) among Frisian children. Generally speaking, we find that the standard deviations decrease when the average transformed scores increase. The same pattern does not really apply to the means and standard deviations among the Dutch children.

From Table 4.41 it can also be seen that the knowledge of Frisian as second language is rather low in general. Perhaps the only exception is lexical knowledge. This variable shows ample variation (*sd* 2.52). It appeared that several Dutch children know few Frisian words, whereas others pick up quite a fair Frisian vocabulary. They probably do so by observation, that is, by hearing the language used by native speakers.

It also showed up that Dutch children find great difficulty when it comes to acquiring more structural aspects of Frisian. Evidently, observation alone does not suffice for the acquisition of structurally encapsulated features of Frisian. In other words, input alone does hardly lead to intake. This is in line with the position of Cummins and Swain (1986), who stressed that language learners need to have opportunities for both receptive and productive use of the language. The same authors warn that language proficiency is not developed through input alone (Cummins and Swain 1986:115). Anyway, most Dutch children have only little knowledge of the structural aspects of Frisian. Furthermore, it turned out that a few Dutch children who grasped the structural aspects of Frisian relatively well, that is, who gained comparatively high *KOF* scores, failed to speak the language in a native-like way. All in all, we contend that, compared to Frisian children who are fluent bilinguals (cf. De Jong and Riemersma 1994:196), our results demonstrate that Dutch children add relatively little to their linguistic repertoire. We claim that one can hardly speak of an additive type of bilingualism among the Dutch children tested.

As mentioned before, age was the single factor that invariably related to the command of Frisian as first language. In contrast, knowledge of Frisian as second language was not strongly linked to the age variable alone. This can be seen from the next table, which gives an overview of the relation between the independent variables and Dutch children's knowledge of Frisian (*KOF*).

Table 4.42: Main and interaction effects among Dutch children

factor	breaking	diminutive formation	*je*-verb conjugation	lexical knowledge	verb raising	KOF
age (AG)	+	+	-	+	-	+
gender (GE)	+	+	+	+	-	+
lang. env. (LE)	-	+	+	+	+	+
AG x GE	+	-	-	+	-	-
AG x LE	-	+	-	+	-	+
GE x LE	-	-	-	-	-	-
AG x GE x LE	-	-	-	-	-	-

The table shows that the independent variables age, gender and language environment are often related to Dutch children's knowledge of the five linguistic variables tested. Table 4.42 also shows that Dutch children's general knowledge of Frisian (*KOF*) relates to age (*AG*), older children performing better as younger ones. But their general knowledge of Frisian is also related to sex (*GE*), girls surpassing boys, and to the language environment (*LE*), Dutch children achieving better as their language environment is more Frisian. It was shown that Dutch children, and young ones in particular (interaction *AG* x *LE*), require a good share of facilitative exposure to Frisian in order to make progress. Acquisition of Frisian as second language takes place especially when Frisian-speaking peers clearly outnumber Dutch-speaking peers.

In sum, it appeared that Dutch children's command of Frisian was not only tied up with personal learner characteristics such as age and sex; it was also greatly expedited by the amount of exposure to the language, which is a contextual factor. In the next chapter we will further examine if, and to what extent, their knowledge of Frisian corresponds to affective learner characteristics.

Chapter 5: Social-psychological data

5.0 Introduction

The focus of the past chapter was on Frisian and Dutch children's linguistic achievements in Frisian. By contrast, Chapter 5 places emphasis on the socio-psychological position of Dutch children with respect to Frisian as second language. We also focus on the link between their socio-psychological disposition towards Frisian and their knowledge of the language. Chapter 5 is dedicated to most of the *L2*-oriented research questions enunciated before (see §3.1). In particular, the following main questions are dealt with:

a. What is Dutch children's socio-psychological disposition towards Frisian in terms of their attitudes to Frisian, their motivation for learning Frisian, and their self-confidence in the language?
b. How does their socio-psychological disposition towards Frisian relate to the variables age, gender and language environment?
c. How does their socio-psychological disposition towards Frisian relate to that of their parents?
d. How does their socio-psychological disposition towards Frisian relate to their knowledge of the language?

The overview of socio-psychological theories on second language acquisition given in Chapter 2 has made clear that affective learner characteristics like *attitude, motivation* and *self-confidence* are seen as important determinants of second language acquisition (see §2.2.2). Therefore, this chapter closely examines these affective characteristics in the language learner. Motivation merits paramount attention as the theories discussed almost unanimously acknowledge that motivation is crucial to understanding the pace and success of second language acquisition. We will also pay attention to the role of the parents in the formation of Dutch children's socio-psychological disposition towards Frisian. The role of parents has been incorporated in the socio-educational model of second language acquisition (see §2.2.2), but only scant research has been conducted on the matter (Gardner 1985:108).

Affective learner characteristics are not strictly individual traits. They develop in interaction with the learner's environment. To trace the impact of environmental forces we will investigate whether Dutch children's socio-psychological disposition towards Frisian is determined by the degree of Frisianness of their everyday environment (for the concept of 'language environment', see §3.2.3).

With regard to the relationship between socio-psychological variables and second language acquisition it is adolescents or adults rather than children who have been the focus of research (cf. Genesee and Hamayan 1980:97). It is also true that socio-psychologically aligned second language acquisition research has predominantly been oriented to the acquisition of high status languages with evident utilitarian benefits (see §2.6). This relative inapplicability of previous socio-psychologically grounded studies on second language acquisition suggests that the research reported here may yield additional insights, since our study atypically focuses upon the link between majority children's socio-psychological orientation towards a less privileged second language and their knowledge of that language.

This chapter centres around a wide range of socio-psychological research variables. The data have been gathered both among Dutch and Frisian children and among Dutch parents. For clarity, the scheme below lists the variables to be analysed among the three groups of informants.

	Dutch children	Dutch parents	Frisian children
language attitudes (questionnaire)	+	+	+
language attitudes (matched-guise)	+	-	+
motivation	+	-	-
perceived motivational support	+	-	-
actual motivational support	-	+	-
self-confidence	+	-	-

From the scheme it can be seen that Dutch children are at the centre in this chapter. The scheme also shows that the language attitudes of Frisian children are considered as well. That is mainly done so as to place Dutch children's attitudes in relief.

We shall work out the analyses on the above-mentioned socio-psychological data in the sections to come. We commence by thoroughly examining the *attitudes* towards Frisian among (Dutch and Frisian) children and Dutch parents (§5.1). We first describe the results of a direct measure of language attitudes through a Likert-type questionnaire. After that, we detail the outcomes of the matched-guise experiment. Finally, we treat Dutch parents' attitudes to Frisian.

Thereafter, Dutch children's *motivation* for learning Frisian as second language is studied, and their *self-confidence* in the language is examined (§5.2). We first introduce the Motivation and Self-confidence Test Battery employed (*MSTB*). After that, we successively analyse the factors resulting from factor analysing the *MSTB* items.

Section 5.3 then goes into the interrelations between the socio-psychological variables distinguished. The next section (§5.4) proceeds to investigate a number of socio-psychological correlates of the command of Frisian[44]. Finally, we wind up the foregoing analyses and we draw a number of conclusions (§5.5).

5.1 Language attitudes

This section goes into the attitudinal findings obtained. The emphasis is on Dutch children's language attitudes, but the attitude of Frisian children is also reported.

[44] The term 'command' refers to children's knowledge of Frisian and their self-reported Frisian language proficiency.

As said, that is chiefly done so as to place Dutch children's attitudes in relief.

The section is divided into three parts. Section 5.1.1 details the outcomes of the more direct assessment of language attitude by means of the Likert-scale technique. In the section following we analyse the results of the indirect measurement through the matched-guise test (§5.1.2). Finally, attention is devoted to the directly-measured attitudes of Dutch parents (§5.1.3).

5.1.1 Likert-scale

To assess children's language attitudes, a questionnaire consisting of ten questions in multiple-choice format was given to them (see Appendix III). For the sake of clarity we record the questions posed in full:

1 If there were Frisian programmes on television everyday, would you watch them?
2 Which sticker would you most like to stick on your bike?
3 How would you like it if you got more Frisian lessons at school?
4 Bouke is a boy who always speaks Frisian at home. He is walking in the street. A motorist stops and asks him for the way in Dutch. What do you think, should Bouke speak Frisian or Dutch to that motorist?
5 How would you like it if your teacher was to speak nearly always in Frisian during arithmetic lessons?
6 In your opinion, is the Frisian language ugly or beautiful?
7 How do you see yourself?
8 Which sign do you think should be posted as you enter the capital (of Friesland)?
9 Froukje is a girl who always speaks Dutch at home. She is walking in the corridor at school. There is a gentleman who carries a handbag. He asks her in Frisian where he can find the director of the school. What do you think, should Froukje speak Frisian or Dutch to that gentleman?
10 In your opinion, is the Frisian language unimportant or important?

As can be seen from the above, the items deal with various aspects relative to Frisian or the oral use of the language. Table 5.1 summarises the answers obtained to each separate question. The results are broken down by first language (D vs. F). Note that the children could choose between four answer categories (- to +) on the items 2, 7 and 8 (see Table 5.1), while the other items had five categories (-- to ++).

The figures in Table 5.1 plainly manifest Dutch children's unfavourable attitude to Frisian. For eight out of ten items they score (far) below the middle of the scale (mean obtained minus scale mean has negative outcome). Given this clear general picture, we will only touch upon some of the most conspicuous findings. Chi-square analyses pointed out that the response patterns of Frisian and Dutch children differ to a highly significant degree ($p<.0001$) with all questions posed, except questions 4 and 9, which both relate to the everyday oral use of Frisian. The latter two items do not display diverging opinions between both groups of children ($\chi^2=.60$ and 2.86 respectively, both n.s.).

As regards expected frequency of watching Frisian television programmes (1), we find that Frisian children display a balanced position. Almost half of them (47%) take a more or less neutral view (±). This diverges widely from the

position of Dutch children, as two-thirds of them (66%) express a negative opinion about the expected frequency of watching Frisian television programmes.

Table 5.1: Responses of Dutch and Frisian children to ten attitudinal items, in percentages

question	L1	-- -	- -+	± ...	+ +-	++ +	mean obtained minus scale mean	(*n*)
1 television	D	33	33	30	3	1	-.94	207
	F	6	26	47	15	5	-.13	201
2 sticker	D	49	24	...	9	18	-.55	206
	F	4	6	...	26	63	.97	202
3 lessons	D	26	17	43	8	5	-.51	208
	F	4	9	30	29	27	.66	202
4 usage Frisian boy	D	32	40	19	6	2	-.93	208
	F	30	40	20	6	3	-.86	202
5 med. of instruction	D	41	26	24	6	1	-1.00	208
	F	4	3	22	30	41	1.00	202
6 beautiful	D	4	11	61	17	6	.10	208
	F	1	2	11	42	44	1.26	202
7 identity	D	61	24	...	12	3	-.94	206
	F	-	1	...	37	62	1.10	202
8 place name	D	42	47	...	10	1	-.80	208
	F	7	34	...	35	24	.26	202
9 usage Dutch girl	D	10	21	33	27	9	.05	208
	F	6	21	33	29	11	.19	202
10 important	D	8	20	54	13	4	-.14	208
	F	4	2	22	42	29	.90	202

Extremely large contrasts between Frisian and Dutch children are observed with the questions concerning the use of Frisian as medium of instruction (5) and the one about self-identification (7). Whilst Frisian children frequently (71%) appreciate the use of Frisian as vehicle of instruction, Dutch children mostly (67%) disapprove of it. With regard to the identity-related question a majority of Frisian children (62%) opt for a Frisian identity, whereas most Dutch children (61%) categorise themselves as Dutch.

So far, we have looked at the outcomes of single items. However, the questionnaire purports to represent one attitudinal dimension. To check whether this presupposition holds, a (principal component) factor analysis has been carried out on the basis of all children's data. The next table gives the rotated factor matrix produced.

Table 5.2: Rotated factor matrix of the scores on the attitude questionnaire (explained variance 58.5%)

item	factor 1	factor 2
1 television	.62*	.15
2 sticker	.74*	.07
3 lessons	.74*	.02
5 medium of instruction	.85*	.01
6 beautiful	.84*	.07
7 identity	.82*	.16
8 place name	.75*	.04
10 important	.72*	.14
4 usage Frisian boy	.19	.78*
9 usage Dutch girl	.18	.66*

Table 5.2 shows that the factor analysis came up with a two-factor solution (eigenvalue >1.00). From the table it can be read that the items 1, 2, 3, 5, 6, 7, 8 and 10 load heavily on factor one, which is denoted as *general language attitude (GLA)*. The other items (4 and 9) concern the oral use of Frisian in everyday interaction. These two items load highly on the second factor extracted, that is designated as *language usage attitude (LUA)*. As *LUA* pertains to a valuation of language choice it forms a normative variable.

Subsequent statistical analyses have then been carried out on the scores on the two factors (*GLA* and *LUA*). These have been computed by taking the average of the scores on the particular items loading on each factor.

To start with, we verified whether or not Frisian and Dutch children differ with respect to their *GLA* and *LUA* scores. Given the outcomes summarised in Table 5.1 it is predictable to find a highly significant difference for *GLA*. That is indeed what a *t*-test evidences (t=23.72, p<.001). Frisian children obtain a mean *GLA* score of 3.56, whereas the mean of Dutch children comes to 2.21. As the mid-point of the scale is 3.00, the mean of Frisian children implies, broadly speaking, that their general attitude to Frisian can be considered *moderately positive*. Similarly, Dutch children's general language attitude can be regarded *fairly negative*. The finding that first language is such an all-important variable determining the directly measured attitude to Frisian is in concordance with outcomes of earlier research among primary school children in Friesland (Ytsma 1990a).

By contrast, the difference between the average scores of Frisian and Dutch children on the *LUA* scale did not reach a statistically significant level (t=1.40). The means concerned amount to 2.66 and 2.56 respectively. In short, Frisian and Dutch children hold quite similar normative views on the everyday oral use of Frisian.

Now that we have looked at the difference between the directly measured attitudes to Frisian according to the language background of the children, we focus on the results of the group of Dutch children in particular. Does their general attitude to Frisian relate to their age and gender, and is their general language attitude connected to their language environment? To answer this, we

carried out an analysis of variance in which the dependent variable *general language attitude (GLA)* is related to the factors age, gender and language environment. Table 5.3 presents the results.

Table 5.3: ANOVA (regression approach) on GLA for Dutch children

factor	SS	df	F	p
age (AG)	.90	1	2.64	n.s.
gender (GE)	.51	1	1.51	n.s.
lang. env. (LE)	3.18	2	4.67	<.01
AG × GE	.56	1	1.65	n.s.
AG × LE	.60	2	.88	n.s.
GE × LE	.57	2	.84	n.s.
AG × GE × LE	.34	2	.50	n.s.
mean (5 - 8)	2.15	2.27		
mean (♂ - ♀)	2.14	2.28		
mean (A - B - C)	2.15	2.06	2.36	

The results are clear-cut: we find a statistically significant main effect only for the factor language environment. The *GLA* means obtained in the distinct language environments are 2.15, 2.06 and 2.36. These figures suggest that the overall attitude to Frisian is most favourable in the strongest Frisian environment (C). This is confirmed by a multiple-comparison test (Tukey's *HSD*), which identified a statistically significant difference between the means in category B and C (α=.05). No other pair of groups was significantly different.

In addition, the finding that language environment is influential to Dutch children's general attitude to Frisian is not in line with the outcomes on *GLA* among Frisian children. An analysis of variance on these children's *GLA* revealed no significant (main or interaction) effects at all.

Next to the general attitude to Frisian, the factor analysis identified a second attitudinal variable labelled *language usage attitude (LUA)*. As mentioned before, this factor reflects the normative valuation of the everyday use of Frisian by peers. Table 5.4 presents the outcomes of the analysis of variance on *LUA*. Dutch children's language usage attitude is related to the regular set of independent variables: age, gender and language environment.

The only significant main effect encountered in Table 5.4 is the one of age. Younger Dutch children's attitude to the oral use of Frisian (mean=2.71) is more positive than the attitude of older Dutch children (mean=2.39). Evidently, Dutch children's language usage norm changes as they get older. Further, the table shows that the factor language environment is not meaningfully connected to Dutch children's language usage attitude. This is rather remarkable as frequency of oral use of Frisian happens to be the decisive criterion as to the three language environments distinguished, and one could easily imagine that the everyday environment in which Dutch children live corresponds to their language usage norm. Yet, that is not the case. Finally, Table 5.4 shows that none of the interaction effects is statistically significant.

Table 5.4: ANOVA (regression approach) on LUA for Dutch children

factor	SS	df	F	p
age (AG)	4.74	1	11.22	<.001
gender (GE)	.11	1	.26	n.s.
lang. env. (LE)	.58	2	.69	n.s.
AG x GE	.23	1	.54	n.s.
AG x LE	1.35	2	1.60	n.s.
GE x LE	2.04	2	2.42	n.s.
AG x GE x LE	.07	2	.09	n.s.
mean (5 - 8)	2.71	2.39		
mean (♂ - ♀)	2.59	2.52		
mean (A - B - C)	2.49	2.55	2.60	

As far as the age effect is concerned, the above findings on Dutch children's *LUA* are in agreement with the outcomes among Frisian children. The latter too proved to be less positive towards the oral use of Frisian as they grew older ($F=11.34$, $p<.01$). The *LUA* means were 2.86 (grade 5) and 2.47 (grade 8). However, unlike the analysis among Dutch children, the *ANOVA* for Frisian children also revealed an effect of gender ($F=7.58$, $p<.01$). Frisian boys (mean=2.81) obtained a slightly higher average score than girls (mean=2.54).

5.1.2 Matched-guise

The results detailed in the previous section dealt with the outcomes of the relatively direct measure of language attitudes. In addition, the attitudes about Frisian were also indirectly assessed through the matched-guise technique (see Appendix IV). The children were asked to rate a speaker, who alternately used Frisian and Dutch in different speech fragments. In total, 15 evaluative items were given to respond. The children could tick their position on bipolar five-point scales.

The rotated factor matrix unfolded the solution depicted in Table 5.5. It is based on the evaluations of Dutch and Frisian children.

The table shows a tripartite division of items (eigenvalue >1.00). Seven items (2, 4, 7, 9, 11, 13 and 15) load on factor one, which is denoted as *solidarity* (*SOL*). The items 1, 3, 5 and 8 load on the second factor, that is designated as *social status* (*SST*). Third, we find that the items 10, 12, and 14 load on the last factor, that is labelled *economic status* (*EST*). Broadly speaking, these findings are in keeping with the usual idea of language being evaluated according to the underlying dimensions of status (or prestige) and solidarity (cf. Ryan 1979).

Scores on the respective factors (*SOL, SST* and *EST*) have been calculated by determining the average of the items loading on them. It is of interest to find out whether Dutch and Frisian children assign different solidarity and status values to the Frisian and Dutch languages. This has been checked through *t*-tests. First, *t*-testing proved that Dutch children do not attribute significantly different solidarity value (*SOL*) to Frisian and Dutch. That is unlike Frisian children, as

these attach a somewhat higher solidarity value to their first language than to Dutch. The means obtained are 3.18 and 3.01 respectively (t=-2.25, df=196, p<.05). Second, t-tests revealed that neither group of children attributes a significantly higher social status (*SST*) to Dutch than to Frisian. Third, as to the judgement of the factor economic status (*EST*), t-tests demonstrated again that neither group of children assigns a significantly different status to Dutch than to Frisian.

Table 5.5: Rotated factor matrix of the scores on the matched-guise test (explained variance 49.3%)

item	factor 1	factor 2	factor 3
2 companionable	.59*	.28	.07
4 friendly	.63*	.20	.23
7 teacher	.68*	.13	.07
9 funny	.63*	.32	.12
11 nice	.63*	.36	.04
13 father	.61*	.09	-.05
15 neighbour	.69*	.06	.15
1 smart	.22	.70*	-.08
3 neat	.21	.56*	.27
5 diligent	.27	.71*	-.03
8 important	.24	.55*	.24
10 rich	.01	.50	.52*
12 distinguished	-.04	.38	.68*
14 profession	.19	-.15	.67*

Difference scores have been calculated for the three factors. These were based on the contrast between the valuation of Dutch and Frisian fragments by the same speaker. A positive difference score reflects a more favourable appraisal of Dutch. By contrast, a negative difference score stands for a judgement to the advantage of Frisian.

We first wish to know whether Dutch and Frisian children obtained equal difference scores on the three factors in question. Figure 5.1. therefore presents Dutch and Frisian children's mean difference scores on solidarity, social status and economic status.

Figure 5.1 shows that the two groups of children differ with respect to the solidarity value attached to Frisian. Frisian children tend to prefer Frisian in terms of solidarity (mean=-.14), while Dutch children judge the solidarity value of Dutch somewhat more favourably (mean=.11). *T*-testing showed that the contrast between the *SOL* means (-.14 vs. .11) is statistically significant (t=-2.35, p<.05). However, t-tests showed that Dutch and Frisian children did not differ significantly with regard to their *SST* and *EST* difference scores.

Following the same procedure used with both directly measured attitudinal variables (*GLA* and *LUA*; see §5.1.1), distinct analyses of variance were carried out for Dutch and Frisian children on the three attitudinal factors arrived at by the matched-guise technique. The results of these analyses are successively worked out.

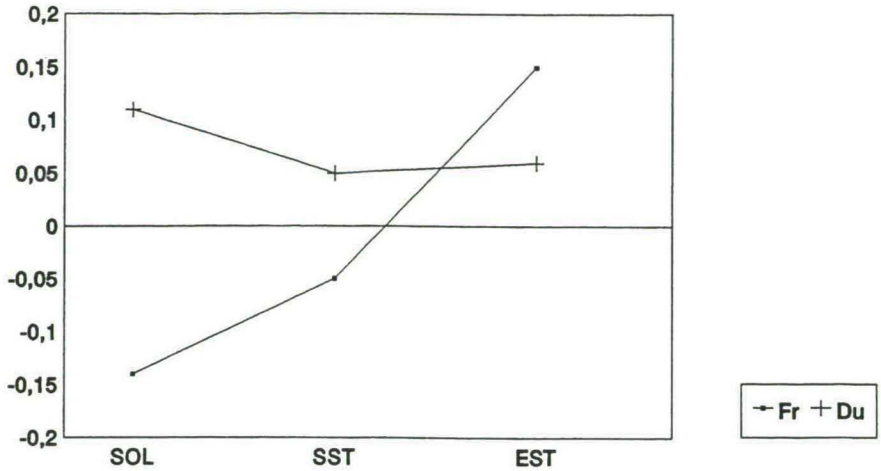

Figure 5.1: Dutch and Frisian children's mean difference scores on solidarity (SOL), social status (SST) and economic status (EST)

Solidarity

The first analysis of variance concentrates on the group of Dutch children. *SOL* was linked to the variables age, gender and language environment. It was found that none of the (main or interaction) effects reached a statistically significant level. We therefore feel justified in concluding that the relative solidarity judgement of Frisian is associated neither with Dutch children's age and gender, nor with their language environment. With that, *SOL* forms a highly stable dimension of Dutch children's social valuation of the second language.

This applies to Frisian children as well. It appeared that for them, none of the (main or interaction) effects was significant.

Social status

Analysis of variance was again first carried out on the *SST* difference scores of Dutch children. *SST* was again linked to their age, gender and language environment. It showed up that the relative social status attached to Frisian did not relate to any factor distinguished. There were no significant (main or interaction) effects at all, and so we conclude that the relative social status of Frisian does also form a stable evaluative dimension.

That is unlike the outcomes obtained among Frisian children, since it was found that the relative social status of Frisian was higher for boys (mean=-.23) than for girls (mean=-.10). The gender difference proved statistically significant ($F=4.91$, $p<.05$).

Economic status

The first analysis centres on Dutch children's valuation of Frisian's economic status. The results are portrayed in Table 5.6. From the table it appears that none of the main effects is statistically significant. But the interaction effect between the factors age (grade level) and language environment does attain a significant level.

Table 5.6: ANOVA (regression approach) on EST for Dutch children

factor	SS	df	F	p
age (AG)	.32	1	.30	n.s.
gender (GE)	.02	1	.02	n.s.
lang. env. (LE)	.23	2	.11	n.s.
AG × GE	1.01	1	.95	n.s.
AG × LE	10.10	2	4.74	<.05
GE × LE	2.11	2	.99	n.s.
AG × GE × LE	1.55	2	.73	n.s.
mean (5 - 8)	.02	.14		
mean (♂ - ♀)	.09	.06		
mean (A - B - C)	.09	.12	.02	

Figure 5.2 additionally presents the figures relative to the interaction effect. It gives the mean *EST* difference scores, broken down by age and language environment.

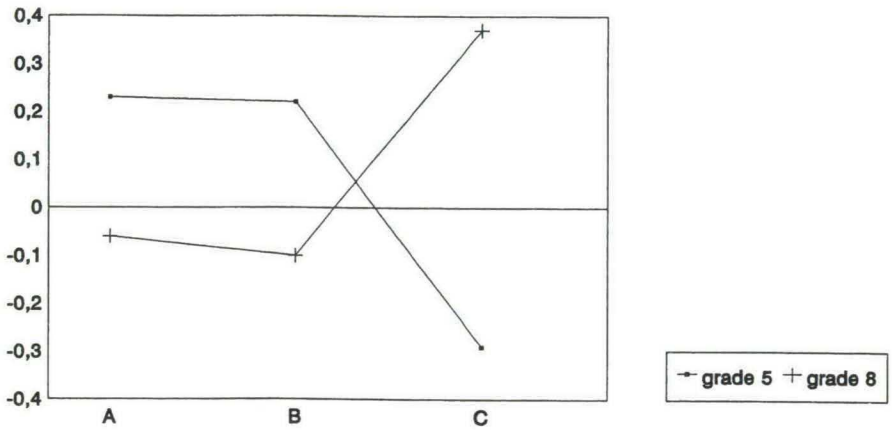

Figure 5.2: Dutch children's mean EST scores, by language environment and age [45]

Simple effect tests reveal that the age-based *EST* difference does not diverge to a statistically significant degree in language environments A and B (F=1.24 and 1.51 respectively). But the *EST* difference scores in the most salient Frisian environment (C) do significantly deviate per grade level (F=8.89, $p<.01$). Recapitulating the above, we conclude that in the strongest Frisian language environment (C) the comparatively high economic status which young Dutch children (grade 5) attach to Frisian is not existent at the end of elementary school.

[45] A/5=.23, A/8=-.06, B/5=.22, B/8=-.10, C/5=-.29, C/8=.37

Finally, to compare the findings among the Dutch children reported in the above, we mention the results among the Frisian children. These were clear-cut: an *ANOVA* showed that none of the (main or interaction) effects was statistically significant.

5.1.3 Parental attitudes

A questionnaire containing ten Likert-type items was designed to tap the attitudes of Dutch parents to Frisian (see Appendix VI). Several questions were similar to the ones put to the children. We come back to that farther on.

No less than 168 parents (couples) responded, and consequently the response percentage is high (81%). The good response may be a sign of parents' commitment to the subject at issue. Their interest in the matter is also reflected by the fact that several parents wrote down their opinion about Frisian on the questionnaire form. Some illustrative examples of these spontaneous elaborations are laid down below:

'In view of a united Europe, Frisian will be left out of consideration; even Dutch will likely be left out of account. Within a few years, higher schools will use English as vehicle'.

'The changes of place names in the municipality *Tietjerksteradeel* are fanatical and ridiculous, but interesting for a small group of Frisians'.

'More Frisian lessons at school would be wrong in my opinion, because I notice that the children mix up the whole thing. Frisian words in a Dutch sentence, or the other way round. Wrong sentences or something like it. At primary school Dutch should prevail! If needed, more Frisian in secondary education'.

Other Dutch parents spontaneously modified the wording of the statements or answer categories. One parent, for instance, changed the statement *The use of Frisian should be restricted in certain cases* to *The use of Frisian should be restricted anyhow*. Three distinct parents subtly converted the answer category *I feel Dutch* into *I am Dutch*, thereby suggesting that 'feeling Dutch' is too strongly an affective sentiment for them. In another case, the same answer category was altered into *I feel Dutch and Gronings* (the latter referring to the Dutch province of Groningen). Yet another Dutch parent wrote that s/he was not *against* the idea of a teacher who was to speak nearly always in Frisian, but *very much* against it.

Lastly, there were some Dutch parents who justified their responses. A parent answered that the Frisian language was *important* as it represented a cultural heritage. The same one disagreed with the statement that Frisian should become the official language of the province, *because it is a Dutch province*. Another parent explained the fact that s/he was not in favour of more Frisian lessons at primary school as this would be at the cost of another lesson. The same parent remarked that the Frisian language was beautiful *if spoken by a real Frisian*. Finally, on the question whether or not Frisian was considered important a Dutch parent commented that *Frisian is important here in Friesland, but Friesland is only a small part of The Netherlands*.

The above remarks seem to hold more negative than positive elements. We will now further examine whether this impression does indeed adequately characterise

Dutch parents' attitude to Frisian. We have a look at the responses given at ten attitudinal items about various aspects of Frisian (see Appendix VI). By giving the means obtained on the five point scales concerned, the next table concisely reproduces the replies of Dutch parents.

Table 5.7: Dutch parents' means on ten attitudinal items (n=168)

item	mean obtained	*sd*	scale mean	difference
television	1.86	.83	3.00	-1.14
lessons	2.01	1.31	3.00	-.99
instruction	1.27	.73	3.00	-1.73
importance	2.67	1.26	3.00	-.33
beauty	3.52	1.24	3.00	.52
command	1.80	1.13	3.00	-1.20
usage	2.00	1.28	3.00	-1.00
official	1.33	.81	3.00	-1.67
identity	1.64	.69	*2.50*	-.86
place name	1.74	.57	*2.50*	-.76

Table 5.7 documents that Dutch parents express unfavourable opinions on 9 out of 10 items. They consistently score below the theoretical mean (i.e. 3.00 or 2.50). The negative 'differences' - mean obtained minus scale mean - signal a negative attitude to Frisian.

Dutch parents overtly deprecate the use of Frisian as a vehicle of instruction in primary schooling. The difference between the mean score obtained on this item (1.27) and the theoretical mean of the item-scale (3.00) amounts to -1.73.

Second, Dutch parents overtly disapprove of the proposition that Frisian should become the official language of the province of Friesland. The difference between the mean obtained (1.33) and the middle of the scale (3.00) comes to -1.67.

The single item where Dutch parents express a somewhat affirmative inclination concerns the aesthetic value of the Frisian language. The positive difference amounts to .52. Notwithstanding the outcomes obtained with this particular item we conclude by reason of the figures reported that Dutch parents generally do not evaluate Frisian positively.

An interesting question is whether Dutch parents' attitude to Frisian corresponds to the attitude of their children. We have five items to compare the attitudes of parents and children. These items are included both in the inquiry form of the parents and in the children's form. On purpose, the wording was identical as far as possible, in order to enable between-group comparison.

Table 5.8 presents the results of the *t*-tests on the scores of parents and children. Note that the figures pertain to paired groups of Dutch parents and their *own* children.

Table 5.8: Mean scores on five attitudinal items, obtained by Dutch parents and their children

item	# pairs	mean parents	*sd*	mean children	*sd*	*t*	sig
identity	154	1.64	.69	1.54	.81	-1.14	n.s.
place name	158	1.74	.57	1.72	.67	-.37	n.s.
television	156	1.87	.83	2.05	.91	-1.91	n.s.
importance	158	2.68	1.27	2.85	.92	1.49	n.s.
beauty	158	3.52	1.28	3.15	.78	-3.63	<.001

On the whole, the figures in Table 5.8 demonstrate that Dutch parents and their children do not exhibit varying opinions. We only observe a statistically significant difference as to the perceived aesthetic value of Frisian, parents being more inclined to acknowledge the 'beauty' of Frisian than are their children.

To compare the attitude of parents and children at another level, the scores on the five items have been condensed into one scale. That scale turned out to be fairly reliable; Cronbach's alpha was .70 among Dutch children and amounted to .75 among the parents. Children's and parents' mean scale scores were then *t*-tested. The means were 11.45 and 11.21 respectively and the difference between the means proved nonsignificant (t=-.80, df=151). So it turned out that parental attitudes to Frisian do not meaningfully deviate from the attitudes of their children.

In addition, we correlated the scale scores among parents and children to explore if, and to what extent, these run parallel. Pearson's r turned out to be significant (r=.29, p<.001). Assuming that parental attitudes mould the attitudes of their children (cf. Gardner 1985), the value of this correlation coefficient signifies that 8.4% of variance in Dutch children's attitudes to Frisian can be assigned to parental impetus.

5.2 Motivation and self-confidence

In this section we shall analyse Dutch children's motivation for learning Frisian and their self-confidence in the language. The factor of motivation is focally treated. As motivation and self-confidence are affective characteristics typical of second-language learners, this section focuses on Dutch children only. We shall examine whether the motivation for learning Frisian and self-confidence in Frisian relate to their age, gender and language environment.

The section is divided into five parts. Section 5.2.1 first details the outcomes on the test battery designed to tap Dutch children's motivation and self-confidence (*MSTB*, see Appendix V). The sections to follow then successively discuss the four factors that emerged from factor analysing the items of the said test battery: (*a*) motivation (§5.2.2), (*b*) perceived parental motivational support (§5.2.3), (*c*) perceived motivational support from the second language group (§5.2.4) and (*d*) self-confidence (§5.2.5).

5.2.1 Motivation and Self-confidence Test Battery

To investigate Dutch children's motivation for learning Frisian as second language and their self-confidence in the language, an adapted version of Gardner's Attitude and Motivation Test Battery has been applied. That version is called here the *Motivation and Self-confidence Test Battery (MSTB)*. The *MSTB* incorporates a large number of items focusing in the main on children's motivation for learning Frisian, on the degree of motivational support which they perceive, and on their self-confidence in the second language (cf. Gardner and Smythe 1981, Gardner 1985:177-180).

A (principal component) factor analysis was carried out to determine the loadings of the *MSTB* items on the factors extracted. Initially, the rotated factor matrix unfolded a seven-factor solution (eigenvalue >1.00). This solution is unsatisfactory, as it includes too many factors. We therefore carried out another factor analysis whereby the number of factors was set at four. This number was chosen as the first four factors extracted in the seven-factor solution reflected the principal constituents of the Motivation and Self-confidence Test Battery (*MSTB*). The next table gives an overview of the results.

Table 5.9: Rotated factor matrix of the scores on the MSTB (explained variance 49.2%)

item (see Appendix V)	factor 1	factor 2	factor 3	factor 4
B1	.56*	.28	.21	.02
B2	.72*	.15	.16	-.09
A3	.80*	.11	.13	.09
A6	.76*	-.02	.10	-.07
B3	.67*	.24	.34	-.06
A7	.79*	.16	.12	.00
C1	.06	.75*	.07	.00
C2	.19	.76*	.10	-.01
C3	.14	.67*	.23	-.01
C4	.12	.72*	.13	.12
C5	.23	.81*	.11	.15
D2	.08	.12	.67*	.08
D3	.24	.02	.58*	.10
D4	.20	.20	.59*	-.05
D5	.18	.11	.78*	.13
D6	.15	.25	.60*	-.21
E1	-.09	-.07	.10	.77*
E2	.08	.04	.02	.76*
E3	-.19	.27	.01	.51*
E4	-.04	.02	-.11	.70*

We find that the items B1, B2, B3, A3, A6 and A7 load strongly on the first factor extracted, which is denoted as *motivation (MOT)*. It turned out that the *MSTB* items which purport to encompass integrative orientations (A3, A6 and A7) load on the same factor as the items principally targeting instrumental orientations (B1 to B3). It follows that the two orientations which are theoretically distinguished - integrative and instrumental orientations - do not comprise separate entities in our context.

The second factor consists of variables related to *perceived parental motivational support (PPS)*. All five *MSTB* items concerned (C1 to C5) load highly on that factor.

Third, the items D2 to D6 load on the factor designated as *perceived motivational support from the second language group (PMS)*. The children's peer-group may well be a vital source of motivational support from the second language group (D3 and D4). The items D2, D5 and D6 pertain to the 'distant' second language group of 'Frisian people'.

Finally, it turns out that four items (E1 to E4) loaded heavily on the last factor derived, that is denoted as *self-confidence (SCON)*.

In the next parts of this section we direct our attention to the four factors derived from factor analysing the items of the Motivation and Self-confidence Test Battery. We shall successively examine:
(*a*) Dutch children's motivation for learning Frisian;
(*b*) their perceived motivational support from the parents;
(*c*) their perceived motivational support from the second language group;
(*d*) their self-confidence in the language.

The first question guiding the next parts is to what extent Dutch children are motivated, perceive motivational support (from parents and from the second language group) and are confident in Frisian. The other question is how the four socio-psychological factors relate to Dutch children's age, gender, and language environment.

5.2.2 Motivation

The prime factor extracted by the just-mentioned factor analysis, concerns Dutch children's motivation for learning Frisian. It was demonstrated that the factor motivation encompassed integrative and instrumental orientations as well (see Table 5.9).

To assess the strength of Dutch children's motivation we can compare their average score gained at the *MOT* scale with the middle of the scale (3.00). It shows up that the average score amounts to 2.38. Ten percent of the Dutch children even obtained the minimum value of 1.00 at the *MOT* scale. From the comparison between obtained and theoretical *MOT* means (2.38 vs. 3.00) we infer that Dutch children's motivation to learn Frisian is low.

That is concretised by the spread of replies on the six statements at issue (see Appendix V), which is depicted in the next table.

Table 5.10.: Spread of replies on MOT items, in percentages

statement (mean)	--[46]	-	±	+	++	(*n*)
A3 (2.20)	29	38	21	9	3	201
A6 (2.04)	32	42	17	4	3	201
A7 (2.23)	29	40	17	10	5	203
B1 (2.80)	17	25	27	21	9	203
B2 (2.38)	26	34	23	12	5	203
B3 (2.59)	22	27	29	18	5	203

Looking at the answers per statement, we notice the most substantial difference between item A6 (mean=2.04) and item B1 (mean=2.80). The wording of statement A6 was 'When you are able to understand Frisian, then you really fit in with the rest of the class'. This item originally aims to cover integrative orientation (see Appendix V). We find the lowest percentage of positive responses here (+ or ++) - namely 7 percent in total - and we observe the highest portion of negative responses (-- or -). It shows up that nearly three quarters of Dutch children (74%) dissent from this particular statement. The relatively unfavourable estimation of Frisian's integrative benefit is confirmed by the finding that merely 12% of Dutch children assent to the proposition 'If you can speak Frisian it is easier to make friends' (item A3). The figures alluded to suggest that Dutch children perceive no great peer group benefits in learning to understand and/or speak Frisian.

This contrasts with the outcomes obtained from statement B1: 'If you can understand and speak Frisian, it will be easier to find a job in Friesland later on'. In spite of the fact that many Dutch children (42%) do not agree with this statement (-- or -), we find that nearly a third of them (30%) do assent to it. The latter obviously believe that oracy in Frisian has some instrumental prospects.

The assertion that Dutch children are poorly motivated to learn Frisian can be refined by connecting *MOT* with their age, gender and language environment. Is Dutch children's motivation to learn Frisian tied up to any or all of these factors? We performed an analysis of variance to answer this question. The single statistically significant main effect was that of age ($F=29.46$, $p<.001$). Importantly, it appears that older Dutch children, who gain a *MOT* score of 2.06 on average, are significantly weaker motivated to learn Frisian than their younger Dutch school mates (mean=2.68). None of the interaction effects attained the level of significance.

It seems not improbable to expect that the factor of language environment affects Dutch children's motivation, since the wish to learn Frisian as second language seems more obvious in an ambience in which the presence of the language is markedly felt than in a milieu where the language exists less vigorously. Nonetheless, it appears that the factor language environment does not significantly

[46] Note that the categories -- to ++ are established after recodings where this was appropriate.

differentiate in the degree in which Dutch children report willingness to learn Frisian. In other words, Dutch children are equally (poorly) motivated, no matter how Frisian their language environment.

5.2.3 Perceived parental motivational support

The second factor which the factor analysis on the *MSTB* items provided (see Table 5.9), embodies Dutch children's perceived parental motivational support (*PPS*). Their mean score on the *PPS* scale constructed turned out to be 2.72. Comparison with the middle of the scale (3.00) clarifies that Dutch children tend to perceive only little motivational support from their parents to learn Frisian.

That is further evidenced by the spread of replies on the five *PPS* items (see Appendix V). That is presented in the following table.

Table 5.11: Spread of replies on PPS items, in percentages

statement (mean)	--[47]	-	±	+	++	(*n*)
C1 (2.73)	15	21	44	17	3	203
C2 (2.74)	19	18	40	18	6	203
C3 (2.83)	13	22	38	23	4	202
C4 (2.77)	15	16	52	12	3	203
C5 (2.54)	19	27	41	10	4	203

The percentages detailed above indicate relatively small differences between the five items. From the means given we infer that statement C3 (My parents think it is nice when I speak Frisian) still elicits the most positive replies, whereas we find the most negative replies on item C5 (My parents think it is important for me to be able to speak Frisian).

Next, we investigate whether Dutch children's perceived parental motivational support relates to their age, gender and language environment. The analysis of variance presented traces the connection between *PPS* and the independent variables. The results are given in Table 5.12.

First, we notice a statistically significant main effect of age. The average scores of older and younger Dutch children are 2.60 and 2.85 respectively. The lower mean of the older group evidences that Dutch children in grade eight perceive less motivational support by their parents than do their younger Dutch school mates. We return to that.

[47] Note that the categories -- to ++ are established after recodings where this was appropriate.

Table 5.12: ANOVA (regression approach) on perceived parental motivational support (PPS)

factor	SS	df	F	p
age (AG)	3.15	1	4.77	<.05
gender (GE)	.34	1	.51	n.s.
lang. environment (LE)	2.01	2	1.53	n.s.
AG x GE	3.28	1	4.98	<.05
AG x LE	.76	2	.57	n.s.
GE x LE	.90	2	.68	n.s.
AG x GE x LE	.82	2	.62	n.s.
mean (5 - 8)	2.85	2.60		
mean (♂ - ♀)	2.79	2.67		
mean (A - B - C)	2.69	2.64	2.83	

Furthermore, we detect a statistically significant interaction effect between the variables age and gender. Figure 5.3 elucidates that effect.

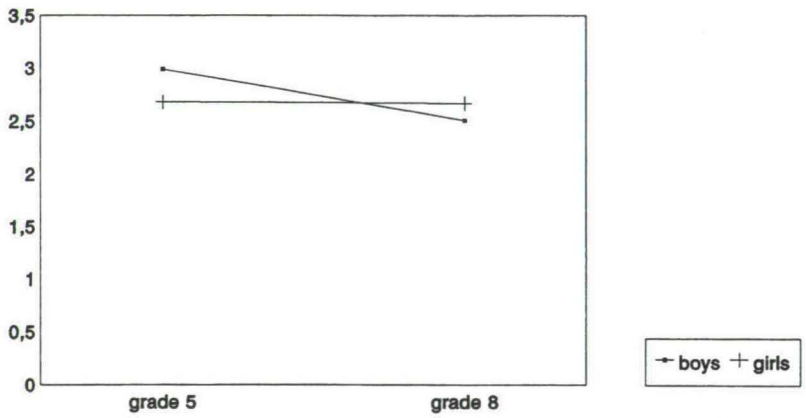

Figure 5.3: Dutch children's mean PPS scores, by gender and age [48]

Simple effect tests have been carried out to verify the differences between the *PPS* means of Dutch boys and girls per age level and - conversely - between the average scores of younger and older Dutch children per gender. These reveal that Dutch boys perceive less parental support as they get older ($F=8.79$, $p<.01$), whilst girls' *PPS* does not differ significantly between grades five and eight ($F=.01$). Moreover, simple effect tests do not demonstrate statistically significant gender differences per grade level. So the age effect mentioned earlier is to be attributed to Dutch boys only.

[48] ♂/5=2.99, ♂/8=2.51, ♀/5=2.68, ♀/8=2.67

In summary, we found that Dutch children generally perceive little motivational support from their parents. In addition, we wish to find out whether Dutch children's negative perceived parental support fits indices of *actual* support to learn Frisian stated by Dutch parents themselves. In other words, is Dutch children's perceived parental support in keeping with the actual motivational support indicated by their parents?

To investigate this, we look at three behavioral indicators of actual parental support: (*a*) talking with children about striking Frisian words or expressions, (*b*) correcting children's errors in speaking Frisian, and (*c*) buying Frisian children's books (see Appendix VI). Table 5.13 summarises the results on these indicators of actual motivational support.

Table 5.13: Actual motivational support from Dutch parents, in % (n=168)

	talking	*correcting*	*buying*
often[49]	2.4	6.6	.6
sometimes	34.7	24.1	6.1
occasionally	33.5	25.9	14.5
never	29.3	43.4	78.8

The figures above assert a low level of actual motivational support to learn Frisian. It turns out that about three out of ten Dutch parents/couples (29%) never talk about unusual Frisian words or expressions with their children. Moreover, slightly less than half of them (43%) never correct their children's errors in spoken Frisian. Finally, it showed up that almost eight out of ten Dutch parents (79%) never purchase a Frisian children's book. In short, we observe that Dutch children tend to perceive low parental motivational support and that matches the sparse actual supportive behaviour of the parents.

It is interesting to inquire further whether Dutch children's *PPS* concurs with the degree of back-up indicated by their parents. We can trace the connection between *perceived* and *reported* motivational support by relating responses to the *MSTB* items concerned (children's perception) to five virtually identical items put to the parents (reported parental support). For instance, we asked the children to respond to the proposition 'My parents think that Frisian is an important language' (children's *perceived* parental motivational support; *PPS*) and we asked the parents themselves about the importance they attached to the Frisian language (*reported* parental motivational support).

By means of *t*-tests we first inspect the (dis)similarity between perceived and reported parental motivational support. Note that the figures below pertain to paired groups of Dutch parents and their own children.

[49] The following recodings were applied in cases of disagreement between parents: 1.5=often; 2.5=sometimes; 3.5=occasionally.

Table 5.14: Mean scores on parental support items, obtained by Dutch parents and their children

item	#pairs	mean parents	*sd*	mean children	*sd*	*t*=	sig
importance	166	2.63	1.29	2.76	1.00	1.23	n.s.
beauty	166	3.47	1.28	2.74	1.02	-7.36	<.001
understanding	166	3.53	.97	2.72	1.15	-8.44	<.001
speaking (1)[50]	165	1.74	.57	1.72	.67	-.37	n.s.
speaking (2)	166	2.46	.93	2.54	1.03	.96	n.s.

The outcomes presented above reveal two statistically significant contrasts between perceived and reported parental motivational support for learning Frisian. These contrasts concern the aesthetic value of Frisian and the relevance of learning to understand the language. These are precisely the two items where Dutch parents' indicated motivational support is beyond the theoretical scale means (3.00). In both instances, the motivational support reported by Dutch parents exceeds the extent to which their children perceive parental motivational support.

We then summed the scores on the five items mentioned above to construct a scale about motivational support. The reliability of that scale was fairly high. Cronbach's alpha amounted to .85 for both groups. Next we *t*-tested the means obtained on this scale by Dutch parents and children. In this way it was ascertained that the motivational support reported by Dutch parents (mean=15.56, *sd*=4.25) exceeds their children's perception of it (mean=13.63, *sd*=4.23). The *t*-value comes to 5.83 (*df*=160, $p<.001$). So Dutch children tend to have a comparatively negative perception of parental motivational support.

Finally, we correlated the scale scores obtained by children and parents to see whether perceived and reported parental motivational support show statistical association. Pearson's *r* came to .52 ($p<.001$), which means that perceived and reported parental motivational support run parallel to a sizeable extent.

5.2.4 Perceived motivational support from the second language group

Next to the perception of parents' motivational support, the factor analysis on the *MSTB* items disclosed a comparable factor, labelled as *perceived motivational support from the second language group (PMS)*. When we speak of the 'second language group', one must keep in mind that this broad term refers in fact to 'Frisian people' and Frisian children as well (see Table 5.9 and Appendix V).

The mean *PMS* scale score gained by Dutch children amounts to 3.14, which comes close to the middle of the scale (3.00). This betokens that Dutch children generally do not perceive a lot of motivational support from the second language group to learn Frisian.

[50] speaking (1)=nice; speaking (2)=important

The next table explores the *PMS* findings in more detail. It presents the division of the replies among the five items in hand.

Table 5.15: Spread of replies on PMS items, in percentages

statement (mean)	--[51]	-	±	+	++	(*n*)
D2 (2.90)	9	20	48	18	5	201
D3 (2.98)	5	19	52	19	4	203
D4 (1.78)	8	32	40	12	7	203
D5 (3.32)	4	11	41	36	8	202
D6 (3.31)	5	12	36	39	7	201

The table reveals that a minor portion of Dutch children (23%) feels that Frisian people think it is (very) important (+ or ++) for a Dutch child to be able to speak Frisian (item D2). Remarkably, it shows that nearly half of the Dutch children (48%) have no notion of this particular item (don't know (±)). By comparison with item D2 which focused on *speaking* Frisian, the responses to statement D6 reveal that twice as many Dutch children (46%) believe that Frisian people think it is of importance for a Dutch child to be capable of *understanding* Frisian.

This 46% varies widely from the corresponding percentage found at item D4. As distinct from item D2, which was about perceived support from 'Frisian people', item D4 nominated the Frisian peer group as second language group: 'Frisian children in my class think it is important that I can understand Frisian'. Instead of 46% approval among Dutch children, we notice that only about one out of five Dutch children (19%) agrees with the last mentioned statement. That brings us to infer that Dutch children perceive more back-up from 'Frisian people' than from their Frisian peers.

We attempt to particularise this main finding that Dutch children tend to perceive at least some support from the second language group for learning Frisian. We do so by linking *PMS* to Dutch children's age and gender, and to the degree of Frisianness of the immediate environment in which they find themselves. The possible relationship between these variables has been investigated by means of analysis of variance. None of the (main or interaction) effects was statistically significant. We conclude that the perceived motivational support from the second language group is a highly stable factor, which remains unaffected by any of the personal or contextual variables under consideration.

5.2.5 Self-confidence

The fourth and final factor which the factor analysis on the *MSTB* items distilled, reflected Dutch children's *self-confidence* in Frisian (*SCON*). Dutch children's mean obtained on the *SCON* scale constructed amounts to 3.81. This position is

[51] Note that the categories -- to ++ were established after recodings where this was appropriate.

clearly beyond the centre of the scale (3.00). Such a comparatively high average score suggests that many Dutch children are not insecure in speaking the language. The outcomes given in the next table clarify this conclusion. The figures present Dutch children's answers on the individual items.

Table 5.16: Spread of replies on SCON items, in percentages

statement (mean)	--[52]	-	±	+	++	(*n*)
E1 (3.87)	4	14	6	42	34	201
E2 (3.98)	1	13	5	47	33	203
E3 (3.69)	1	16	17	44	22	202
E4 (3.70)	2	15	17	40	25	202

First, it appears that both items E1 and E2 reveal very similar response patterns. That is perhaps rather unsurprising, as the difference between these two items originally is in their wording and direction (see Appendix V). The wording of statement E1 is 'I dare not speak Frisian', whilst statement E2 reads 'I do dare to speak Frisian'. Interestingly, the outcomes obtained at these two differently formulated items turn out to show remarkably high congruence. In both cases, about three quarters of Dutch children (respectively 76 and 80%) claim they dare to speak Frisian.

Item E3 (I do not speak Frisian for I will never learn to do it properly) indicates that Dutch children have no low opinion of their oral facility in Frisian. Only a minor portion of them (17%) agrees with the statement, while two-third of them (66%) disagrees with it, thus showing confidence in speaking Frisian.

Finally, the outcomes obtained with item E4 (I am afraid that people will laugh at me when I speak Frisian) illustrate again that many Dutch children are not insecure in speaking Frisian. Only 17% report being (very) frightened of being laughed at when speaking the language (-- or -), thereby showing little self-confidence in Frisian.

We then explored by means of analysis of variance whether the degree of self-confidence in Frisian corresponds to Dutch children's age and gender, and to the Frisianness of their language environment. The results are summarised in Table 5.17.

We find that Dutch children's self-confidence in Frisian relates to the factor language environment. Tukey's *HSD* test ascertains that the difference is located between language environment B (mean=3.65) and C (mean=3.98).

[52] Note that the categories -- to ++ were established after recodings where this was appropriate.

Table 5.17: ANOVA (regression approach) on self-confidence (SCON)

factor	SS	df	F	p
age (AG)	.08	1	.14	n.s.
gender (GE)	.84	1	1.56	n.s.
lang. environment (LE)	4.35	2	4.03	<.05
AG × GE	1.53	1	2.85	n.s.
AG × LE	1.03	2	.95	n.s.
GE × LE	3.75	2	3.48	<.05
AG × GE × LE	2.71	2	2.52	n.s.
mean (5 - 8)	3.81	3.80		
mean (♂ - ♀)	3.84	3.78		
mean (A - B - C)	3.73	3.65	3.98	

Moreover, we come across a statistically significant interaction effect between the variables gender and language environment. Figure 5.4 depicts the effect.

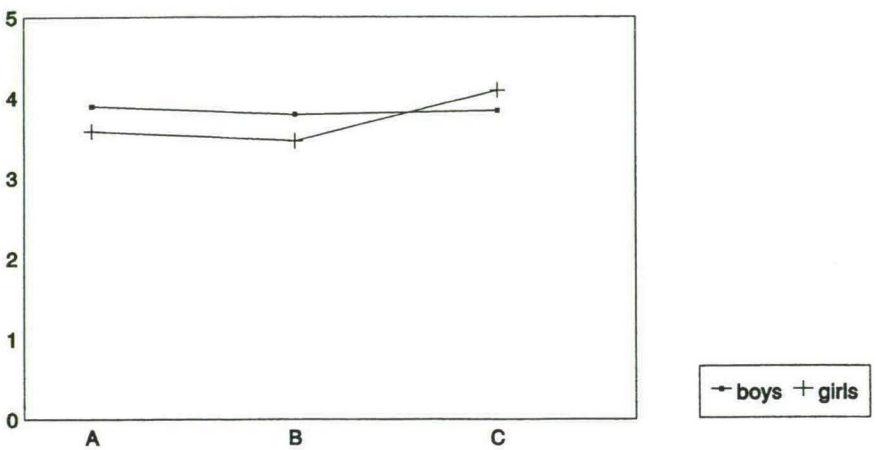

Figure 5.4: Dutch children's mean SCON scores, by gender and language environment [53]

From the figure it can be seen that Dutch boys' self- confidence in Frisian does not relate to the factor of language environment. By contrast, we find that Dutch girls are somewhat more confident in speaking Frisian in the most Frisian environment (C). However, simple effect tests proved that there was no statistically significant age-based difference in the degree of self-confidence in any language environment.

[53] A/♂=3.89, A/♀=3.58, B/♂=3.79, B/♀=3.46, C/♂=3.84, C/♀=4.09

5.3 Interrelations between socio-psychological variables

In the preceding sections, we analysed the separate variables relative to (*a*) language attitudes (*GLA, LUA, SOL, SST* and *EST*), (*b*) motivation (*MOT, PPS* and *PMS*) and (*c*) self-confidence (*SCON*). Now we explore connections between these affective characteristics in the second-language learner. There are several reasons for this. For example, it is of interest whether directly and indirectly measured attitudinal variables (*GLA* and *LUA* versus *SOL, SST* and *EST*) relate to one another. But it is also worthwhile to trace the possible link between the core-variable of motivation and other socio-psychological variables.

The matrix below includes the nine variables under research.

Table 5.18: Pearson's r between the socio-psychological variables (Dutch children, n=191)

	LUA	SOL	SST	EST	MOT	PPS	PMS	SCON
GLA	.19	-.18	-.15	.01	.15	.39**	.28**	.19*
LUA	-.-	.11	.08	.01	.07	.19	.03	.04
SOL		-.-	.57**	.28**	.08	-.03	-.03	.02
SST			-.-	.30**	.08	.03	-.06	-.02
EST				-.-	-.06	-.01	.01	.02
MOT					-.-	.41**	.49**	-.07
PPS						-.-	.42**	.11
PMS							-.-	.03

Table 5.18 reveals that Dutch children's general language attitude (*GLA*) relates significantly to the variables perceived parental motivational support (*PPS*), perceived motivational support from the second language group (*PMS*) and to the variable self-confidence in Frisian (*SCON*).

Furthermore, we observe that the three attitudinal factors extracted from the matched-guise test (namely solidarity (*SOL*), social status (*SST*) and economic status (*EST*)) show a fairly strong interrelationship. But they do not relate to any other socio-psychological variable, not even to the direct measures of language attitudes (*GLA* and *LUA*).

Of special interest are the variables possibly relating to the key variable of motivation. As we mentioned earlier (§2.2.2), Gardner (1985) posits that there are at least two determiners of motivation. First, his socio-educational model holds that language attitudes are co-determinants of motivation. Second, Gardner's model presupposes that motivation is affected by the perceived motivational support from the second language group and, in the case of second language learning youngsters, by the degree to which they feel they are motivated by their parents to learn the target language.

The correlations listed above allow us briefly to test these two assumptions. To verify the relation between language attitudes and motivation, we looked at the association between the attitudinal variables *GLA, LUA, SOL, SST* and *EST*

on the one hand and the factor motivation (*MOT*) on the other. None of the correlations proved significant. In short, our empirical findings invariably disprove a linkage between language attitudes and motivation.

In order to check the other presumption that Dutch children's motivation to learn Frisian is affected by their perceived motivational support from the second language group and from their parents, we consider the correlations between perceived parental motivational support (*PPS*) and perceived motivational support from the second language group (*PMS*) on one side and motivation (*MOT*) on the other. It showed that both support variables correlate significantly with one another (r=.42) and with the level of motivation. The respective values of r came to .41 (*PPS*) and .49 (*PMS*). Within the scope of Gardner's model this means that Dutch children's motivation to learn Frisian is determined by their perceived motivational support from the second language group almost equally strongly as by their perceived parental support. In summary, we conclude that our findings confirm the connection between perceived motivational support and level of motivation.

5.4 Socio-psychological correlates of Frisian language proficiency

The socio-psychological variables examined in the previous sections are worth studying in themselves, but they assume their true significance as regards their possible influence on the pace and success of second language acquisition. To examine socio-psychological correlates of the command of Frisian we first briefly pay attention to the link between the attitude of Dutch parents and children to Frisian and their *self-reported* command of the language as far as the basic skills of understanding, speaking, reading and writing are concerned. Thereafter, we focus on the children. We relate their socio-psychological disposition towards Frisian (i.e. attitudes, motivation and self-confidence) to their knowledge of Frisian in terms of the five linguistic variables investigated.

Self-reported second language proficiency

To measure Dutch parents' general attitudes to Frisian (*GLA*) we constructed a Likert-type attitude scale by adding up every item of the questionnaire involved (see Table 5.7). Summing the items is justified as the ten items jointly formed a fairly reliable scale (Cronbach's alpha=.84). The scores on the attitude scale were then correlated with parents' self-reported Frisian language proficiency. Reported language proficiency was determined through self-ratings on bipolar five-point scales on the ability to understand, speak, read and write Frisian. The positions of these scales varied from 'not at all' to 'very easy'.

It turned out that parental language attitudes correlated significantly with every self-estimated language skill. Pearson's r came to .30 (understanding), .33 (speaking), .25 (reading) and .28 (writing). As the scores on the four language skills consistently intercorrelated (p<.001), they were condensed into one variable labelled *self-reported second language ability (SRLAB)*. The correlation between the scores on the language attitude scale and the scale about self-reported language ability proved significant: r=.38 (p<.001).

Similar procedures were applied to gauge the connection between the language attitude of Dutch children (*GLA*) and their self-reported command of Frisian. This time, Pearson's r amounted to .70 (understanding), .75 (speaking), .52 (reading) and .44 (writing). Again, the four language skills intercorrelated

significantly ($p<.001$) and were combined into the variable *SRLAB*. We again computed the correlation between *GLA* and *SRLAB*. That proved highly significant ($r=.75$, $p<.001$).

To recapitulate the above, Table 5.19 presents an overview in which the variable general language attitude is connected with the different measures of self-reported second language proficiency.

Table 5.19: Pearson's r between Dutch parents' and children's GLA and five measures of self-reported second language proficiency

	understand	speak	read	write	*SRLAB*
GLA parents	.30	.33	.25	.28	.38
GLA children	.70	.75	.52	.44	.75

The correlations given above evidence that directly measured language attitudes are consistently tied to indices of self-reported second language ability. That is specially true for Dutch children, where the correlations arrived at are mostly twice as strong as those found among Dutch parents. As will be explained further on, this contrasts sharply with other findings about the link between Dutch children's general language attitude and their knowledge of the second language.

Knowledge of Frisian as second language

The preceding analyses dealt with the connection between the attitude to Frisian of Dutch parents and children and their self-reported oral and written command of the language. We now proceed to relate Dutch children's socio-psychological disposition towards Frisian to their knowledge of the language. We do so by correlating attitudinal variables (*GLA, LUA, SOL, SST* and *EST*), motivational variables (*MOT, PPS* and *PMS*) and the variable of self-confidence (*SCON*) with the index of knowledge of Frisian composed (*KOF*, see §4.7). The next table records the correlations obtained.

Table 5.20: Pearson's r between socio-psychological variables and KOF (Dutch children, n=181)

	GLA	*SCON*	*PMS*	*PPS*	*EST*	*LUA*	*SST*	*SOL*	*MOT*
KOF	.32**	.25*	.11	.10	.07	.03	-.04	-.05	-.09

The table reveals that Dutch children's general attitude to Frisian (*GLA*) and their self-confidence in the language (*SCON*) are meaningfully associated with their knowledge of Frisian as second language (*KOF*). It is also found that the other socio-psychological variables under consideration do not show significant correlations ($\alpha=.01$). All this suggests that the directly measured, more conscious general language attitude (*GLA*) 'works', while indirectly assessed, rather subconscious language attitudes (*SOL, EST* and *SST*) do not.

We can define the effect of both active socio-psychological factors (*GLA* and *SCON*) more narrowly by splitting up *KOF* into its constituting elements, that is,

into the linguistic variables that make up the index. Thus, we correlate *GLA* and *SCON* with the five linguistic variables breaking, diminutive formation, *je*-verb conjugation, lexical knowledge and verb-raising. The following table enumerates the correlations involved.

Table 5.21: Pearson's r between GLA and SCON, and the linguistic variables (Dutch children, n=192)

	break	dim	*je*-v	lex	v-rais
GLA	.12	.22*	.26**	.25**	.06
SCON	.23*	.16	.06	.29**	.11

Table 5.21 shows that *GLA* and *SCON* do not consistently correlate significantly with the achievements on every language test (α=.01). *SCON* fails to correlate significantly with three linguistic variables: diminutive formation, *je*-verb conjugation and verb-raising. On the other hand, the table exposes that both socio-psychological variables are connected with lexical knowledge of Frisian. We return to this later on.

In order to study further the relative predictive potential of the variables general language attitude and self-confidence we perform a (stepwise) multiple-regression analysis. *KOF* is the dependent variable and the predictor variables are age (*AG*), gender (*GE*), language environment and the nine socio-psychological factors. Language environment has been entered after dummy coding (cf. Rietveld and Van Hout 1993:102). The dummy variables are denoted as *LE1* and *LE2*. Table 5.22 portrays the outcomes.

Table 5.22: Stepwise multiple-regression analysis on KOF, for Dutch children (n=206)

Multiple *R*	.65
R square	.43
	beta
AG	.33***
LE1	-.42***
LE2	-.27**
GLA	.16*
GE	.17*
SCON	.17*

The value of R square reveals that the factors entered in the regression equation altogether explain 43% of *KOF* variance. The beta's in the table indicate that language environment (LE1/LE2) and age (AG) constitute the better predictors of Dutch children's knowledge of Frisian. The relative influence of both socio-psychological variables is only modest. The beta-weights for general language attitude (GLA) and self-confidence (SCON) come to .16 and .17 respectively. These beta-weights come close to the one of gender (GE).

In addition, a comparable regression analysis has been carried out on the quality judgements of Dutch children's spoken Frisian, that was part of the project *Taalpeiling yn Fryslân* (De Jong and Riemersma 1994:119, see §1.4)[54]. This analysis revealed that language environment (LE1/LE2) was the sole statistically significant predictor of the quality judgement of Dutch children's spoken Frisian. The dummy variables constructed, LE1 and LE2, explained 21% of variance.

On the one hand one might say that these results moderate the effect which socio-psychological variables are theoretically thought to have on the acquisition of a second language. But on the other hand, one should consider that much empirical work has been unable to assess conclusively the influence of socio-psychological variables. In this respect, Oller and his associates (1977:3) mention an overview of 33 Canadian samples of subjects showing that the highest correlation between a socio-psychological variable and a measure of attained second language proficiency was only .21. In light of that, our findings are not all that bad. This is particularly true when bearing in mind that adding the socio-psychological variables in the regression equation results in 9% increase of explained *KOF* variance (compare Table 4.33).

Inquiring into the socio-psychological variables discussed so far may not only be relevant in its own right. As some of the prior analyses performed in this section witnessed, investigating these variables may also be germane in view of their possible effect on the rate and success of second language acquisition. We believe there are also good reasons to explore the correspondence between language attitudinal findings and the acquisition of Frisian as *first* language. It has been mentioned that positive language attitudes may restrict language change, while negative attitudes reinforce it (cf. Münstermann 1989). In a similar vein, one can argue that minority children's positive attitude to their less robust first language fosters standard-like first language development, whereas neutral or negative attitudes possibly induce non-standard linguistic variants during first language acquisition. In association with this, Schmidt (1985:218) posits for instance that two factors - insufficient exposure and attitude - relate to Dyirbal semi-speakers' incomplete language acquisition.

To test the above line of reasoning, we related the attitudinal data gleaned among Frisian children to their scores on the *KOF* index. It appeared that none of the (five) attitudinal measures correlated significantly at the 1% level. However, when alpha was set at five percent, the overall attitude to Frisian (*GLA*) correlated significantly (r=.18, n=196). Such a low correlation denotes that only a very limited portion of *KOF* variance (3%) can be credited to Frisian children's attitude to their first language. Moreover, when we correlated Frisian children's *GLA* to their attainment on the five separate linguistic variables, it was found that none of the correlations arrived at proved statistically significant (α=.01). These figures point out again that the assumed link between the variables general language attitude and first language acquisition is indeed negligible.

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[54] Note that age could not be entered in the equation, because the project *Taalpeiling yn Fryslân* included only children from grade eight.

5.5 Summary and conclusions

In the closing part of this chapter we briefly sum up the most interesting results obtained from the analyses of the socio-psychological data. We will also compare the results of the present study to those reported in other empirical work, and we place our findings within the scope of a number of theoretical notions pertaining to socio-psychological determinants of second language acquisition. Finally, throughout the course of this section, we draw a number of conclusions.

First, the results of the direct measurement of Dutch children's general attitude to Frisian (*GLA*) pointed out that their overall attitude can best be characterised as fairly negative. That differs from the moderately positive attitudes of Frisian children. This pattern confirms previous research findings among primary school children in Friesland (Ytsma 1990a). Interestingly, the results show that Dutch children's general language attitude is less unfavourable in the most Frisian language environment (C) than it is in the 'balanced' language environment (B). This demonstrates that language attitudes are sensitive to contextual influence, and with that it is shown that attitudes are indeed not strictly individual affective learner characteristics. The general attitude to Frisian of Dutch boys and girls does not differ significantly. That is unlike findings reported in other research. For instance, Sharp et al. (1973:81-82) found in Wales that across each age group distinguished (10^+, 12^+ and 14^+), girls - Welsh and English as well - had significantly more favourable attitudes to Welsh than boys.

Dutch children's normative attitude about the use of Frisian in everyday interaction (*LUA*) is comparable to the language usage attitude of Frisian children. Furthermore, it is of interest to note that probably as part of the ongoing socialisation process, both Dutch and Frisian children's (normative) attitude to the oral use of Frisian deteriorates as they grow older.

The negative general attitude of Dutch children (*GLA*) matches the attitude of their parents. Our findings indicate that Dutch parents also do not evaluate Frisian positively. Some of them hold strikingly negative views on the language. Nevertheless, to some extent they tend to recognise the 'beauty' of the language. As has been stressed by Giles and Coupland (1991:37-38), the appreciation of the aesthetic value of a language is not in fact based on its inherent linguistic qualities of beauty so much as on the status conventionally associated with it. Viewed in that light, Dutch parents' recognition of the beauty of Frisian signals that they do not overtly disparage its status.

Gardner (1985:108) is right in arguing that it is a pity that only limited research has been conducted into the role of parents in the formation of language attitudes. As attitudes are acquired characteristics, parents must be regarded as primary agents of attitude formation. Nonetheless, Gardner (1985:109) quotes Harding et al. (1969) who regard parents as major socialisation agents, but who also warn that children may develop attitudes contrary to the prevailing sentiments surrounding them. In short, caution is required when considering parents to be the sole agents of socialisation.

As regards the role of parents in the formation of language attitudes we were able to demonstrate that the general language attitude of Dutch children and their parents ran parallel to some extent. More specifically, it could be shown that over 8% of variability in Dutch children's general attitude to Frisian is traceable to parental impetus. That is to say that Dutch parents do indeed mould their chil-

dren's attitudes to Frisian, albeit to a modest extent. This fits in with Gardner's (1985:113) conclusion concerning the development of ethnic attitudes, namely that the correlation between parents' and children's attitudes - though significant - is not high. He argues that the moderate relationship is probably due to the fact that the ethnic attitudes studied may not be particularly salient. However, lack of salience seems not to be at stake in our study, since Dutch parents and children expressed quite pronounced language attitudes.

As stated, Dutch parents did not evaluate Frisian positively, but other research evidences that majority parents do not always show dissenting feelings about indigenous minority languages. For example, Lyon and Ellis (1991:249) recently reported that parents living in Anglesey (North Wales) were overwhelmingly in favour of Welsh, whatever their own linguistic background. The same authors add to this that the English-speaking parents studied are mainly influenced by instrumental factors. Among this group of majority parents, enhancement of future job prospects was a popular reason for wanting their children to speak Welsh. With an eye to the modest place of spoken Frisian in the domain of work (cf. Gorter et al. 1984:177-78, 1988:17; Gorter and Jonkman 1994) and the very limited position of written Frisian in that domain, an instrumental reason seems less likely in Friesland.

Furthermore, it appeared that Dutch parents' general attitude to Frisian was connected to their self-reported command of the language in terms of understanding, speaking, reading and writing. Significantly, it was found that Dutch children's general language attitude related even more strongly to their self-reported oral and written command of Frisian. Among both groups (Dutch parents and Dutch children) it was found that self-reported ability and language attitude showed positive correlations. In all probability, the fact that the measurement of the mastery of the second language was based on self-report largely explains the strength of the relationship with the socio-psychological variable of language attitude. We return to this later on.

We realise that the suitability of the matched-guise test for children has been questioned (Day 1982:125). Yet, the results presented reveal that the matched-guise method does not form an unworkable instrument for indirectly assessing language attitudes among school children from about ten years onwards. It has been possible to demonstrate that children do evaluate language on the usual underlying dimensions of status and solidarity. A similar impression about the early applicability of the matched-guise procedure arises from earlier work in Friesland (Ytsma 1990a) and from other research on attitudes of about twelve-year-old children in The Netherlands (Folmer, Van Hout and Vallen 1993, Kerkhoff 1988, Kerkhoff et al. 1988, Van Hout et al. 1989).

With regard to the matched-guise outcomes obtained, it was shown that primary school children are already inclined to judge language on the well-known basic dimensions of status and solidarity (cf. Ryan 1979). However, the difference scores calculated between the valuation of the Dutch and Frisian fragment on these dimensions nowhere show a deep chasm in the appraisal of Dutch vis-à-vis Frisian. This contrasts with the results obtained through direct measurement of the attitude to Frisian, where the children enunciated quite explicit opinions about Frisian. The finding that the most articulate results were obtained by the direct measurement of language attitudes is comparable to Dutch research experiences reported by Vousten and others (1989).

Broadly speaking, our study showed that the children - both Dutch and Frisian - assign no lower economic status (*EST*) to Frisian than to Dutch. Thus, our findings indicate that Frisian is not downgraded as far as its economic status is concerned, and that again is in harmony with the just mentioned position of Dutch parents who tended to recognise the beauty of Frisian. Interestingly, it was also proved that Frisian's economic status was relatively favourably evaluated by young Dutch children living in the most prominent Frisian language environment (C), although this positive evaluation is not existent at the end of primary school. Such findings imply that children's appraisal of the (economic) status of a language is open to personal and contextual factors. The influence of the context in which the language learner finds himself signifies that language attitudes are no mere individual learner characteristics.

Moreover, the matched-guise experiment showed that Frisian children award a greater solidarity value (*SOL*) to Frisian than to Dutch, but Dutch children attach more or less equal solidarity values to both languages. As regards the social status (*SST*) of Frisian and Dutch, neither group of children assigns a greater social prestige to either of the two languages. That is rather remarkable, as it runs counter to research findings among migrant, standard Dutch and dialect-speaking children in The Netherlands. These groups of children all acknowledged the relatively high (social) status of standard Dutch vis-à-vis Dutch dialects in matched-guise tests (Folmer, Van Hout and Vallen 1993, Kerkhoff 1988, Kerkhoff et al. 1988, Van Hout et al. 1989). All this suggests that Dutch dialects are evaluated lower than standard Dutch on the prestige dimension by school children in The Netherlands, while Frisian is not evaluated lower than Dutch on prestige by school children in Friesland. It may well be that the disparate social evaluation of Dutch dialects and Frisian relates to the size of social differences between dialect speakers vis-à-vis speakers of standard Dutch on the one hand, and Frisian speakers vis-à-vis standard Dutch speakers on the other. Although the socio-economic status (*SES*) of Frisians is somewhat lower than the status of Dutch people in Friesland (cf. Ytsma and De Jong 1993:32), *SES*-differences in Dutch dialect areas are probably greater.

All in all, the above findings do not endorse the conventional belief that minority languages are typically evaluated low on the prestige or status dimension but high on solidarity traits (cf. Giles et al. 1987:586-87). The absence of (economic and social) status contrasts between the two languages may imply that the social evaluation of language is context-bound. The fact that, as stated, comparable matched-guise tests did reveal meaningful status differences between standard Dutch and Dutch dialects among school children supports this interpretation.

The Motivation and Self-confidence Test Battery (*MSTB*) yielded interesting results concerning Dutch children's motivation to learn Frisian and their self-confidence in the second language. First, an analysis of the *MSTB* findings led us to conclude that Dutch children's *motivation* to learn Frisian is minimal. They seem not to be convinced that oral proficiency in Frisian offers clear-cut peer group benefits and only a small portion of them think that literacy in the language is (at all) advantageous with a view to later career opportunities. Importantly, it turned out that the level of motivation was significantly linked with Dutch children's age, older children showing less propensity to learn Frisian than younger ones.

It was also found that Dutch children tend to perceive little motivational support from their parents. That is in agreement with the (very) low level of perceived motivational support from parents observed among standard Dutch speaking youngsters learning a Limburgian dialect as second language (Vousten et al. 1989:141). On the one hand, this negative perception by Dutch children matches the 'actual' back-up to learn Frisian stated by Dutch parents in terms of behavioral supports. But on the other hand, it turned out that parental motivational support as seen by Dutch children remained lower than that reported by their parents. In particular, Dutch parents acknowledged the aesthetic value of Frisian to a higher degree than the children thought their parents did. Likewise, we find a mismatch between perceived and reported motivational support with regard to the importance of learning to understand Frisian. It was proved that Dutch parents generally believed that learning to understand Frisian was more important for their children than Dutch children thought their parents did.

Further, it was shown that Dutch children generally do not perceive ample support from the second language group to learn Frisian. Within the broadly composed second language group, which is made up of 'Frisian people' and Frisian class-mates as well, there are reasons to believe that Dutch children feel more encouragement to learn Frisian from Frisian people in general than from their Frisian peers.

As regards Dutch children's motivation it turned out that the two orientations commonly distinguished in theory - integrative and instrumental orientations (see §3.2.2) - do not constitute discrete entities for Dutch children. The finding that these orientations are not distinct unitary concepts is not unique. In this connection, Knops (1987:88) argued that the division between integrative and instrumental motivation may be artificial or arbitrary. Empirical outcomes reported by Kruidenier and Clément (1986) do indeed point in this direction. One of the main findings of their study on Anglophone and Francophone students learning French or English vs. minority Spanish concerns the lack of evidence for any integrative orientation. Similarly, research findings reported by Vousten (1995) also underpin Knops' conclusion. Among the dialect learning children who had standard Dutch as home language, the distinction between integrative and instrumental orientations also failed to hold good (Vousten 1995:57). On account of these different research findings we feel justified in concluding that the concept of motivation is by no means always neatly partitioned into integrative and instrumental orientations.

As mentioned before, Dutch children's motivation for learning Frisian was poor. What is the origin of this low level of motivation? With respect to the factors influencing motivation we encountered two basically different positions in §2.2.2, the contention of Gardner and the view of Clément. In Gardner's judgement, other individual affective learner characteristics determine motivation (Gardner 1985). By contrast, Clément (1980) is of the opinion that contextual vitality conditions are most effectual.

According to Gardner's conception of attitudes functioning as motivational props, we surmise an intimate connection between Dutch children's attitudes to Frisian and their motivation for learning the second language. However, we saw that none of the (five) attitudinal variables under consideration in the present study correlated significantly with the scores on the scale representing Dutch children's motivation. So, as distinct from Gardner's ideas, language attitudes and

motivation appeared to be unconnected in our study.

Following Gardner's train of thought, Dutch children's motivation should also be determined by their perceived motivational support from the second language group and from their parents. Our results suggest that Dutch children's perceived motivational support was meaningfully associated with their motivation for learning Frisian. In sum, we conclude that our findings do not endorse Gardner's idea of language attitudes acting as co-determinants of motivation, but they do empirically confirm the notion of perceived motivational support partially determining motivation.

As distinct from Gardner's stance, Clément emphasises the impact of environmental forces on motivation. He highlights the relative ethnolinguistic vitality of both the first and second language group. Clément's view leads us to expect that Dutch children's motivation positively relates to the Frisianness of their language environment. For instance, motivation will be strong in environment C, where Frisian exists most prominently and therefore has a high 'vitality'. Roughly speaking, our results underline Clément's outlook. As a whole, the group of Frisian speakers has the lowest vitality in Friesland (cf. Ytsma et al. 1994) and that can explain why Dutch children generally show little motivation to learn the language of a less attractive community. But in a narrower sense, our findings do not endorse Clément's viewpoint, as the factor language environment did not discriminate at all with regard to Dutch children's motivation to learn Frisian. Dutch children were poorly motivated no matter how Frisian their language environment.

Next to insight into Dutch children's motivation, the *MSTB* enabled us to gain some knowledge about Dutch children's *self-confidence* in Frisian. Given the low level of knowledge of Frisian (see Chapter 4), it was surprising to find that many Dutch children claimed to be quite self-confident in speaking Frisian.

Together with Dutch children's general language attitude (*GLA*), the factor of self-confidence (*SCON*) has some predictive power regarding knowledge of Frisian. However, the predictive value of *GLA* and *SCON* is considerably smaller than that of the variables language environment and age. In connection with the strength of the relation between attitudinal factors and second language acquisition by children, Larsen-Freeman and Long (1991:176) have suggested that attitudinal factors may have little influence on second language acquisition by children, perhaps simply because attitudes are not fully developed in young learners. Given the pronounced attitudinal stance of the Dutch children, their interpretation does not seem reasonable in our context.

The weak link between Dutch children's *GLA* and their knowledge of Frisian is in conflict with the strength of the connection between *GLA* and their *self-reported* oral and written command of Frisian. We believe this can principally be explained by assuming that self-reporting is subject to socio-psychological bias. In our opinion, the finding that children's self-estimation of second language ability is socio-psychologically more distorted than parents' self-reported second language ability probably indicates that youngsters in particular fail to block socio-psychological intervention when estimating their own second language ability. The finding that children's self-report on second language ability is perhaps less valid forms an important result from a methodological point of view.

As stated, the connection between *GLA* and *SCON* on the one side and *KOF*

on the other was not impressive. We noticed that *GLA* predicts *KOF* equally well as *SCON*. That diverges from empirical results mentioned by Kerkhoff and others (1988). They consistently found that among standard-speaking Dutch children, dialect-speaking Dutch children and Mediteranean children, the best predictor of Dutch language proficiency was the variable called 'security in Dutch'. Kerkhoff and her associates noticed that security in Dutch overruled the other attitudinal variables investigated, and they added to this that the preponderance of self-confidence has also been mentioned by various other scholars.

Taking into consideration the five distinct linguistic variables studied, we found that the two variables *GLA* and *SCON* were most closely connected with lexical knowledge of Frisian. Lexicon is probably the most conscious component of language. As Labov (1972:272), for instance, asserts, most rules of grammar are quite remote from conscious awareness. We believe that this is not the case for the lexical knowledge of a second language, and we propose that the comparatively high degree of consciousness of lexical knowledge partly explains its relatively close link with Dutch children's directly measured (conscious) language attitude and self-confidence.

Although the factors general language attitude and self-confidence were both associated with Dutch children's knowledge of Frisian to some extent, none of the other socio-psychological variables incorporated in our study meaningfully related to Dutch children's knowledge of Frisian. Not even the key variable of motivation corresponds to their knowledge of the language.

More specifically, we observed that the directly measured general language attitude predicted *KOF*, but the indirectly assessed attitudinal variables (*SOL, EST* and *SST*) did not. By this, our findings run counter to the claim of Oller and others that indirect assessments of language attitudes show closer associations with second language proficiency than do direct attitude measurements (Oller et al. 1977:1).

Not everyone shares the opinion that socio-psychological variables determine the pace and success of second language acquisition (see a.o. Macnamara 1973, Au 1988). But, as was stressed in Chapter 2, such a link is frequently taken for granted at the theoretical level (see §2.2.2). Our study does not corroborate this theoretically presupposed relationship. The findings reported here are consistent rather with the position of Oller and his colleagues, who call into question the importance of attitudinal variables. They stated that many Canadian studies form no empirical evidence for a firm relationship between attitudinal variables and attained second language proficiency in French (Oller et al. 1977:3-4). An example among young learners is given by Genesee and Hamayan (1980), who found no relationship between attitude indices and proficiency in French of six-year-old Anglophone Canadian children.

Appel (1984) and Vermeer (1988) expressed comparable views. Referring to various studies of immigrant children learning Dutch, they remarked that generalising statements about the link between the 'socio-cultural orientation' towards Dutch (which comprised contact and attitudinal/motivational features) and achievement in that language are as yet unwarranted, given that research most often does not lend strong empirical support to such a relationship.

In sum, our findings dovetail with the position of these researchers, who doubt the theoretically assumed relation between socio-psychological variables and second language acquisition. From the outcomes obtained we conclude that not only in the case of the acquisition of relatively powerful second languages with

an undisputed instrumental value (like French or Dutch), but also in the case of the (non-)acquisition of a less prestigious second language with comparatively little instrumental value (such as Frisian), the language learner's socio-psychological disposition towards the second language does not turn out to be of overriding importance.

Finally, we take a brief look at the potential relationship between language attitudes and *first* language acquisition. As regards language acquisition in a minority language it is not inconceivable that minority children's positive language attitudes foster the development of standard-like variants, whereas negative attitudes perhaps tend to go hand in hand with non-standard linguistic forms. Such a link between language attitudes and first language acquisition can be found in the literature, though it is not very prevalent. For example, Schmidt (1985:218-19) makes mention of two Dyirbal speaking siblings who had equal exposure to the Aboriginal language in childhood but showed widely deviating proficiency. The younger sister was proud of her Dyirbal and was much more proficient than the other, who was ashamed of the language. More generally, Schmidt asserts that alongside exposure, attitude was a true causative factor of young Dyirbal speakers' incomplete language acquisition. Returning to our study, we conclude by contrast that such a connection between language attitudes and first language acquisition was not corroborated by our findings.

Chapter 6: Conclusions and discussion

6.0 Introduction

In this closing chapter we revert to the central purposes of our study, and the previously formulated general goals (see §1.3) will serve as our guideline. We do not specifically come back to the research questions posed (see §3.1), since these have been considered at length in the two preceding chapters.

The chapter contains four parts. The first section commences by treating various issues concerning Frisian as first language (§6.1). The focus is on first language acquisition and language change. The next section is about Frisian as second language (§6.2). The acquisition of Frisian by Dutch children is considered here from a sociolinguistic and socio-psychological perspective. The penultimate section then proceeds to evaluate briefly a number of methodological aspects of the study (§6.3). To wind up the chapter the last section delineates a number of themes for future research on language acquisition and language change in Friesland (§6.4).

6.1 Frisian as first language

An important aim of our study was to investigate the acquisition of Frisian as first language among primary school children and, through that, to gain insight into the role of imperfect learning as a source of language change. The linguistic data collected among Frisian children and Frisian parents present evidence that the acquisition of standard-like Frisian among the present generation of primary school children is complicated by the language contact situation in which they find themselves. Significantly, we noted overt signs of *linguistic insecurity* at the morphological level among several Frisian children tested. There was uncertainty about verb-class membership and self-corrections (specially with diminutive formation) occurred more than once. In our contention, such signs of insecurity indicate the instability of the Frisian language structure among the youngest generation of speakers.

A *delayed* or *stagnated* first language acquisition was empirically demonstrated for three out of five linguistic variables under consideration. A delayed or stagnated acquisition was observed for the variables of breaking and diminutive formation (actually the replacement of */ke/* by */tsje/*), while a stagnated development was clearly observed for verb-raising. It was claimed that - compared with the generation of parents - many Frisian school children master these (phonological, morphological and syntactic) rules incompletely. A small portion of them even totally failed to acquire the rules for these variables. All this foreshadows structural changes that Frisian faces. Further, we should consider that several other linguistic variables that were not investigated here will in all probability also attest to the fact that Frisian is liable to structural change. Tiersma (1986) has given several examples of these.

In our view, the delayed or stagnated language acquisition signals that the *primary linguistic data* to which Frisian children are exposed during early childhood are inadequate in establishing a solid linguistic foundation. We think there

are at least two complicating factors in the process of constructing internal grammar. The primary linguistic data consist, of course, of Frisian as it is spoken within the family. It should be understood that the language data supplied by parents and siblings do not form regular, unvarying input. Irregular input can be expected and that forms a first impediment to the process of establishing internal grammar. Another impeding factor is the early and massive exposure to Dutch. This interferes with the required synthesis of knowledge of the Frisian system. Both factors, irregular primary linguistic data and early and massive access to a highly competing language structure, make it difficult for young Frisian children to figure out how their first language works. They draw up hypotheses about their first language, but testing these is impeded. Consequently, it is hard for the Frisian system to take root, and that may partially explain why it is that we found such a late cross-sectional growth among Frisian school children on every language test given to them.

Language contact ultimately causes the process of first language acquisition to delay or stagnate. As a consequence of the rapidly altered language contact situation in the province (see §1.1), the current generation of Frisian children uses its first language less intensely, and outside the family the children are less frequently exposed to Frisian. Insufficient use of and exposure to the first language may bring about *intralinguistic* change. This is probably the case with the phonological rule of *breaking* (see §4.2). That phenomenon is particularly weak as it is non-transparent and has no functional load. As breaking can be seen as one of the most distinctive features of Frisian phonology, leaving out the rule implies a clear case of phonological *simplification*.

In the contemporary language contact situation, Frisian youngsters are nowadays more than ever confronted with Dutch and they frequently use the dominant language. Such a prevalent confrontation with the dominant language generates *interlinguistic* change in the less robust variety. We contend that this is currently going on with the abrupt change of the syntactic rule of *verb-raising* in Frisian. As to the syntactic change observed we propose that a kind of threshold mechanism is at work and explains the striking abruptness of the change. A given threshold level is passed only where there is a high degree of language contact. Once it has been passed, the change proceeds rapidly. As distinct from De Haan (1990, 1992), we are inclined to frame the use of Dutch word order in the Frisian verbal complex as a case of *syntactic borrowing*. In that, Frisian grammar is affected in its very being.

We wish to emphasise once again that the reasons for particular language changes are usually strongly intertwined (see §2.4). A fine example of this is the replacement of the traditional */ke/* diminutive suffix by its Dutchified counterpart */tsje/*. Strictly speaking, the displacement involves an internal change of the Frisian diminutive system itself (cf. De Haan 1990), but its deeper cause lies in the external pressure of Dutch. As indicated earlier, even the basically intralinguistic change occurring to breaking is not entirely detached from the present language contact situation. That illustrates again the relativity of the distinction between intra- and interlinguistic change.

All in all, we argue that the language contact situation in Friesland, in which Frisian primary school children very often hear, see and actively use Dutch induces subtractive tendencies among the children. Their first language may be simplified to a greater or lesser extent and is subject to outer influence. In the long

run this will probably lead to changes of determining characteristics of Frisian.

As can be gathered from the above, it is our contention that child language currently comprises a provable source of language change in the Frisian case of language contact. Older Dutch influences (diminutive formation) and relatively recent Dutch influences (verb-raising) intrude into Frisian largely via the youngest generation of speakers.

We have traced the influence of a number of personal, contextual and socio-psychological factors relative to the acquisition of Frisian as first language. We now briefly summarise the effects of the factors distinguished. First, it was found that age was the single factor that invariably related to the command of Frisian as first language. Cross-sectional growth was small as regards lexical knowledge and comparatively large for breaking. Further, the analyses conducted proved that first language acquisition hardly related to the factor of gender. On the whole, we found that knowledge of Frisian scarcely differed between Frisian boys and girls. Only the results on breaking were congruent with the notion that in first language acquisition females enjoy a rate advantage (cf. Larsen-Freeman and Long 1991: 204); none of the other linguistic variables were meaningfully associated with gender.

It has been proposed that success of first language acquisition corresponds to children's attitude to their first language (Schmidt 1985). However, unlike impressionistic findings reported in Schmidt's study on indigenous minority children, our empirical data do not prove a close link between language attitudes and first language acquisition.

Rather unexpectedly, it turned out that first language acquisition was also not tied to the degree of Frisianness (or Dutchness) of Frisian children's environment. It was expected that the acquisition of Frisian as first language would depend largely on the linguistic make up of Frisian children's everyday environment. It appeared however, that an impact of Dutch exists no matter what linguistic constellation of the population of the schools attended by the Frisian children. As an aside, the ineffectiveness of language environment reminds us of Tiersma's idea of Dutch influence on Frisian being 'vertical': "it comes through the immediate contact which every Frisian has with Dutch-language institutions" (Tiersma 1986:47).

In short, Frisian children's wider environment (i.e. the bilingual province) is inevitably submersive.

We found that many Frisian parents are sensitive to the correctness of their children's Frisian. A majority of them claim to correct their child's language. It is interesting to know whether deliberate parental correction works at an early age. However, our study does not allow for empirically-based general statements about the effects of correction. But on theoretical grounds - and based on personal experience - we question the effectiveness of correction, although we admit that lexical corrections may be effective as vocabulary probably forms a more conscious and less structurally embedded sector of language. As said before, rules of grammar are subconscious at best. This means by definition that parents are unable explicitly to pass on grammatical rules to their young children (cf. Frijn and De Haan 1990:50-52). In the best cases they can correct their children's vocabulary, but incidental correction of the output of internal grammar is unlikely to succeed.

Moreover, young children develop language as a tool for social com-

munication (cf. Hamers and Blanc 1982:32) and therefore they are probably less concerned with formal sides of language. That is another reason to doubt the effectiveness of parental correction. Apart from that, one should realise that an unremitting negative feed-back brings along the risk of unintentionally stigmatising differences from standard Frisian. Parents who are too meticulous in upgrading their children's first language paradoxically run the risk of denigrating the child's language.

All this is not to suggest that Frisian parents cannot influence the quality of their children's first language. We have only to remember the demonstrable shaping role provided by Frisian mothers. It was found that the scores on the overall index of knowledge of Frisian of Frisian mothers correlated significantly with those of their children, whilst this was not the case among Frisian fathers. A plausible explanation for the finding that mothers obviously mould their children's first language to a greater extent is that they still take the lion's share in bringing up a family. In short, parents may undoubtedly have a modelling function. But the strikingly large intergenerational difference observed with the variable of verb-raising calls to mind that parental linguistic patterns do not serve as the sole and decisive language template. Parents clearly set an example to their children, but their example may be overruled by outside influences.

What about the role of schooling? Can education play a part in influencing the quality of Frisian and should it do so? These are delicate questions. It is well enough known that reversing language shift is far from easy (cf. Fishman 1991), but reversing language change seems wellnigh impracticable. We fully realise that schooling alone cannot adjust linguistic developments that seem all but inevitable. Moreover, some changes - and perhaps verb-raising is an example of this - may by now have passed the point of no return. With a view to language maintenance, schooling is nevertheless the most obvious formal institute to take care of the weaker language. Of course, the playgroup is highly influential too, as early assistance can be given to Frisian at this level (cf. Duipmans 1984).

In our opinion, the pedagogical-didactic motive for bilingual schooling has until now been a prominent one in the practice of Frisian primary schools. That motive ends in transitional bilingual education (Meestringa 1983). Nonetheless, maintenance is envisaged at policy level (cf. *Inspectie van het Onderwijs* 1989). Maintenance is also striven for in the central goals that were officially laid down for Frisian at primary level (Staatsblad 1993). We believe that the results of our study underline the need for a stronger maintenance-oriented approach of bilingual education in Friesland. Given the looseness of the Frisian language system encountered among Frisian youngsters we consider it advisable not to neglect the language structural side, perhaps from an incorrect conception of language change as an autonomous process. Schools should of course not regress into form-fetishism, but concern for language form does not necessarily imply an exaggerated fixation on possibly outdated forms. The orientation should be towards maintenance, not towards recovery. As regards didactics, we recommend an inductive strategy involving the functional use of the language structures to be sustained (cf. Van Els et al. 1984:257-261). Furthermore, reading Frisian is helpful, for written Frisian offers a comparatively fixed and standard-like model. Among older children, attention to language forms can be given within the framework of linguistic awareness. Subconscious rules of grammar can be made explicit in that way.

In our estimation, primary schools that do already consciously devote attention to the quality of Frisian, focus largely on lexical transfer from Dutch into Frisian. In view of the ready visibility of words that should not come as a surprise. With an eye to the outcomes of our study it will be clear that we think that schools intending to back up Frisian should also focus on more structural and less discernible aspects of language. In relation with that it is of great importance for teacher training to prepare future teachers, for they cannot communicate structural aspects of Frisian to their pupils if they are themselves ignorant of the rules of grammar. Moreover, it is to be noted that attention to language structure in primary education can be continued in 'basic education'[55]. The educational goals officially set for Frisian at this level of schooling stipulate that pupils know the major differences between Dutch and Frisian as far as phonology, morphology and syntax are concerned.

One cannot know in advance whether or not the guiding approach proposed here is effective. Results attained should therefore be monitored by assessing pupils' linguistic achievements. In any case, the fact that we observed some cross-sectional progress among Frisian children suggests that the acquisition of their first language may be open to educational intervention. The feasibility of the idea of schooling improving the quality of Frisian also receives confirmation from the finding reported by De Jong and Riemersma (1994:122) that the judgement of the quality of spoken Frisian among Frisian children was positively related to the amount of time spent on education in the language.

In view of the foregoing, we suggest establishing a pioneering *maintenance-experiment* in a couple of motivated schools. In this experiment, the whole range of basic language skills - understanding, speaking, reading and writing - must be taken into consideration. Moreover, determining linguistic characteristics of the minority language should be regarded as well. As an integral part of such an experiment, educational practice must be accompanied by research. Empirically founded successful programmes deriving from the experiment can later on be transferred to other schools.

6.2 Frisian as second language

An important purpose of our inquiry was to investigate Frisian as first language. Other aims were to explore the acquisition of Frisian as second language among Dutch primary school children, and to examine closely a number of socio-psychological variables possibly relating to the pace and success with which they acquire Frisian as a second language.

We found that Dutch children's knowledge of Frisian is rather low. It became clear that most Dutch children do have some lexical knowledge of Frisian, although their vocabulary varies widely. Moreover, it was demonstrated that Dutch children experience great difficulty when it comes to the acquisition of more structural, less directly accessible aspects of Frisian. In all likelihood, exposure to Frisian leads to some lexical knowledge of the language, for a great deal of vocabulary can be acquired simply by observation. But productive use is

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[55] This refers to the common curriculum during the first three years of secondary school.

a prerequisite to grasping Frisian's linguistic structure, and such a use of Frisian as second language is just what is missing (cf. Ytsma 1988:66). In brief, we conclude that the language contact situation in Friesland, in which Dutch primary school children are exposed to Frisian to a greater or lesser extent but rarely actively use the language, produces little or no real additive bilingualism among majority children. That is also true in situations where Frisian-speaking children clearly outnumber Dutch ones (i.e. language environment C). Even then, Dutch children are not urged to communicate actively in Frisian.

All this suggests that primary schools wanting to teach spoken Frisian to Dutch pupils - and there are quite a few of these[56] - should emphasise active oral use of the target language. This can be brought about, for example, by intentionally creating learning situations in which Dutch children communicate in the second language.

It was shown that Dutch children's socio-psychological disposition towards Frisian was quite negative. First, it appeared that Dutch children's general *attitude* to Frisian was not positive. The generally unfavourable language attitude of Dutch children corresponds to the attitude observed among Dutch parents. This indicates that parents are indeed relevant socialising agents. The resemblance between the language attitudes of the two successive generations implies that Dutch children have been acculturated into their own language group at an early age.

Frisian's (social and economic) status was evaluated no lower than Dutch by Dutch and Frisian children. That is unlike other research findings on the low status evaluation of Dutch dialects by school children in the Netherlands (cf. Folmer, Van Hout and Vallen 1993, Kerkhoff 1988, Kerkhoff et al. 1988, Van Hout et al. 1989). In that respect one might say that children living in Friesland ascribe a relatively high status to the local minority language.

Importantly, it turned out that Dutch primary school children's *motivation* for learning Frisian is poor in general, and it deteriorates further as they get older. In other words, Frisian holds no great appeal to Dutch children. Moreover, they perceive little *motivational support* to learn the language, neither from their parents nor from the second language group. Like other empirical work (Kruidenier and Clément 1986, Vousten et al. 1989) our study could not present evidence of the theoretical division between integrative and instrumental orientations. So we underscore Knops' (1987:88) assertion that the concept of motivation is not always neatly partitioned into these two basic orientations.

With an eye to bilingual schooling, the low level of Dutch children's motivation to learn Frisian is a finding which deserves due attention. Neither oracy nor literacy in Frisian seems to be perceived as relevant by Dutch children. They often fail to see any reason to learn Frisian as second language. It is up to the schools to clarify why learning Frisian would matter to them. Schools can do so within the scope of language awareness programmes, whereby the roles and functions of the two languages in bilingual Friesland are concretely and realistically explained.

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[56] According to a survey carried out in 1988, 58% of primary schools in Friesland (280 out of 484) reported including speaking ability in Frisian in their educational goals (*Inspectie van het Onderwijs* 1989:31-32).

Next to attitudes and motivation, *self-confidence* in Frisian is an ingredient of Dutch children's socio-psychological disposition towards Frisian. Given their low knowledge of the language it is rather remarkable to find that Dutch children claim to be quite confident in speaking Frisian. However, we must realise that they can probably say so without any obligation, since there is no social pressure for them to use Frisian in genuine communication.

On theoretical grounds we have been led to believe that the affective learner characteristics under research (i.e. attitudes, motivation and self-confidence) influence Dutch children's acquisition of Frisian. Our data revealed, however, that their general attitude to Frisian and their self-confidence in the language actually explain only moderate portions of variance in their knowledge of the second language. Interestingly, it showed that Dutch children's motivation for learning Frisian did not appreciably relate to their knowledge of the language. The latter finding especially is a striking result, given the high relevance attached in theory to motivation. To sum up, the extent to which Dutch children acquire Frisian was associated less with any of the affective learner characteristics distinguished than with the personal factor of age and the contextual factor of language environment, that is with exposure to the second language.

We find ourselves in agreement with various other scholars (Appel 1984, Au 1988, Genesee and Hamayan 1980, Macnamara 1973, Oller et al. 1977, Vermeer 1988, Vousten 1995) who, mostly on empirical grounds, contest the theoretically presupposed impact of affective learner characteristics on the pace and success of second language acquisition. In other research, these learner characteristics often did not conclusively relate to the acquisition of powerful second languages. In our study, these features too failed to explain convincingly the (low level) acquisition of a lesser-used second language. The results obtained by a whole range of empirical studies essentially point in the same direction, namely that affective learner characteristics are probably of smaller importance to second language acquisition than is usually assumed on theoretical grounds. It seems that scholars such as Schumann, Clément and Giles (see §2.2.2) are right in arguing that this kind of individual differences are less influential than environmental forces; a conclusion which also emerges from Vousten's study into the acquisition of a Limburgian dialect as second language (1995:124-126).

6.3 Evaluation

Having discussed some major results of the study, we now briefly evaluate our work from a methodological point of view. We recall that a correlational approach has been applied. Such an approach is appropriate to gaining a broad understanding of first and second language acquisition, and particularly of factors that are supposedly associated with these. It is recommended for future research to deepen the insights by means of longitudinal case studies in which language acquisition is looked at as precisely as possible. In contrast to our study which targeted a focussed description of a number of preselected linguistic variables, case studies can broaden or reduce the set of variables studied if desired.

The power of the correlational method is mainly that it enables us to trace the role of factors influencing the linguistic variables. As regards our study, we believe that the most interesting independent variable relative to language

acquisition has been the factor of language environment. This factor is indicative of the language relationships within the schools, so it constitutes a rough indicator of the frequency of oral language use or input (see §3.2.3). Interestingly, it appeared that the effects of language environment were dissimilar for the acquisition of Frisian as a first and second language. Second language acquisition was clearly connected to language environment, whereas - surprisingly - first language acquisition was not (see §4.10 for further discussion). Language environment proved a workable indicator of second language input in our analyses. But those who wish to investigate the effects of bilingual input in detail may prefer more precise indicators. They might for example look at the linguistic make-up of a child's personal network.

A factor that may influence the speed of language acquisition and language change is the frequency with which a linguistic variable occurs. It should be born in mind that high frequency often acts as a barrier to change (Anttila 1989:187-88). At the same time, high frequency facilitates language acquisition. Throughout the fourth chapter about the analyses of the linguistic data we hinted more than once at the role of frequency. We remarked for instance that highly frequent words may be broken more often in Frisian than less frequent ones. However, statements on the protective role of frequency could be merely speculative, and we therefore consider it wise for research into language acquisition and language change deliberately to include the frequency of the linguistic variables under investigation as a determining variable.

The linguistic data were collected by controlled measurement. In association herewith, the reliability and validity of the assessment techniques come up for discussion. The reliability of the language tests applied has been dealt with in Chapter 4. It turned out that the internal consistency of the tests was on the whole not unsatisfactory. Regarding the validity of the language tests, we assert that most of them have a sufficiently sound face-validity. The language tests employed aim at formally defined linguistic elements. Yet, we claim that the tests are indicative of Frisian language proficiency. This claim seems warranted as an index of knowledge of Frisian constructed on the basis of the five linguistic variables measured (*KOF*, see §4.7) correlates significantly with the quality judgement of spoken Frisian in the project *Language Assessment in Friesland* (De Jong and Riemersma 1994:119). The correlations arrived at amounted to .50 for Frisian children (n=54, p<.001) and .63 for Dutch children (n=55, p<.001). Moreover, in a factor analysis carried out on the language tests it was demonstrated that productive vocabulary, a common measure of language proficiency, loaded heavily on the factor knowledge of Frisian (see §4.7).

For purposes of enhancing the validity of the oral tasks (on breaking, diminutive formation and lexical knowledge), elicitation took place at a lively pace. Even so, normative self-monitoring could not be entirely ruled out, as for instance the data about Frisian children's diminutive formation evidenced. We also noticed that several Dutch children sometimes seemed to produce responses on a basis of trial and error, which is of course not beneficial to the validity of the assessment. Yet, we maintain that the oral tests generally represent children's knowledge of Frisian fairly well.

The test measuring verb-raising may at first sight seem somewhat artificial. Let us recall, however, that a number of observations during the fieldwork at the homes of the Frisian families in some sense validated the results obtained. Moreover, in the section about intergenerational differences (4.8) it was found

that the parental data collected matched very well those obtained in another empirical study (Eising et al. 1981). Importantly, it could be proved that the outcomes obtained by our written test closely paralleled those gathered through an open-ended oral sentence completion task[57].

As to the validity of the written test measuring Frisian *je*-verb conjugation, we prudently remarked that the three distractors incorporated (see §3.4.1) might elicit certain responses among Frisian children that are less frequently heard in ordinary speech. That may also have happened with the test items at issue. Still, we believe that the test involved is valid enough for our overall descriptive purposes.

The validity of the determination of the most important independent variable - language environment - is of interest as well. As language environment did not patently relate to first language acquisition, one might wonder if it has been adequately operationally defined. There are two independent arguments in support of the validity of the factor of language environment. First, it turned out that language environment did meaningfully influence the pace and success of second language acquisition. Second, it has been shown that the schools' estimates of the linguistic constellation of the school population neatly matched the actual distribution of the home language of the population (see §3.3).

Lastly, we touch on some methodologically interesting insights that emerge from our work. As the suitability of the matched-guise procedure amongst children has been doubted (cf. Day 1982:125), we mention once more that the matched-guise test formed a workable instrument for indirectly assessing attitudes to language amongst children from, say, nine years onwards, though we admit that the clearest results were obtained from the direct measurement of attitudes through a Likert-type questionnaire. Another point that is worth mentioning concerns the finding that children's own estimation of second language ability seems to be socio-psychologically tinged to a greater extent than adults' self-reported second language ability (see §5.4). On the basis of this, one can question the validity of self-estimates of second language ability amongst children. Finally, our results point out that it remains important to validate widespread research instruments such as the Attitude and Motivation Test Battery (cf. Gardner and Smythe 1981) afresh in each particular research context. Local conditions may affect the factors that are incorporated in such instruments. The artificiality demonstrated in respect of the distinction between instrumental and integrative orientations is a case in point.

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[57] This task was additionally developed in connection with the longitudinal measurement of verb-raising among Frisian teenagers (see §3.3). Measurement of verb-raising took place in 1994 through an oral sentence completion task and our written task. Five items (nos. 1, 2, 3, 5 and 7; see Appendix II) were syntactically comparable between the two tests. On these items, the oral sentence completion task resulted in 70.6% standard Frisian word orders, while the corresponding figure relative to our written task amounted to 67.0%.

6.4 Further research

To wind up the last chapter we suggest some areas deserving attention in future research. We have already stated that case studies into the acquisition of Frisian as first and second language may valuably complement our work. The application of case studies may mean an alternative method of investigating the same research objects of language acquisition and language change. But other, more or less related, objects of study deserve attention too. Below we indicate a few themes that seem promising to us.

This study quite strongly emphasised the acquisition of Frisian as a first language in a context of language contact and language change. The one caveat that should be stressed is that because of the orientation towards language change one might be tempted to conceive Frisian as a language system that is undergoing total restructuring. That is a fallacy. Let us recall that we deliberately decided to look at those linguistic variables where language contact easily brings about borrowing from Dutch (see §3.2.1), while breaking has its inherent weakness owing to its non-transparency and redundancy. Even so, we found for instance that borrowing of Dutch(ified) diminutive forms is constrained and relexification seems not to be at stake. Subsequent research may attempt to track those linguistic elements that are not subject to change, and it can try to locate factors restraining change.

The fact that many Frisian parents corrected the language of their own children suggests that they tend to appraise 'correct' Frisian[58]. We also know from personal experience that Frisian adults are often annoyed to hear certain non-standard linguistic elements used by Frisian children or grown-ups. In other words, it seems that such elements are not always socially accepted. Relatedly, a small study by Jonkman (1982) revealed that Dutch-speaking students preferred 'standard' (distinguished) Frisian to 'neutral' (ordinary) and 'regional' (*Súdwest-hoek*) Frisian, as distinct from Frisian-speaking students, who had a preference for neutral Frisian. Furthermore, Feitsma (1984:73) argued that if two forms co-exist in Frisian, the Frisian form has the image [+traditional] as a rule, while its Dutch(ified) counterpart has the connotation [+modern]. The topic of study pointed to in the above - the social evaluation of language variation and language change - has received little attention in the research conducted thus far. We underline the need to make a searching examination of the social evaluation of language variation and language change in Friesland.

A topic that relates to the social evaluation of language variation and language change is the possible connection between language attitudes and language change. Far too little is known about that. Our study did not demonstrate a clear link between language attitudes and first language acquisition among Frisian children. That does not inevitably mean that the attitudes of Frisian adult speakers to Frisian do not correspond to their command of the language structure. It is

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[58] Comparable observations have been made elsewhere. For instance, referring to the North-Frisian case, Parker (1993:17) reported numerous parental complaints with regard to their children's competence in North-Frisian.

commonly thought that language attitudes predict language use. Do they also correspond to persistence of language form? In relation to this, Woolard (1989:357) wrote that "at least when language defense is a conscious process, the will for maintenance and for purity do seem to have the same roots; whether this also holds for less selfconscious processes is not entirely clear". Moreover, Münstermann (1989) proposed that positive attitudes delay change, while negative attitudes accelerate it. Along similar lines, Baker (1992:34) remarked that "the potential exists for language attitudes to become helpful explanatory variables in language decay where minority languages are declining or in peril". We consider the possible connection between language attitudes and language change an intriguing problem that merits attention in future research (cf. Hiemstra 1993: 547).

As said, comprehensive case studies might valuably complement the present inquiry. It should prove interesting to gauge individual variability in the acquisition and use of linguistic forms among young speakers (pre-schoolers and primary school children). For each linguistic variable under investigation we saw that several Frisian children use standard forms only, whilst a few exclusively use non-standard patterns. But the greater part of Frisian children apply standard and non-standard forms alternately. All this clearly evidences that aggregated variability at group level does not necessarily correspond with individual variability. Widespread variability at group level can exist while a portion of individual group members show no variability at all. The object would be to unravel individual variability as finely as possible. It has been stated that instances of relatively stable variation occur at group level (cf. Hinskens 1992:6). To what extent can individual variation be stable too? In any case, the role of parental input and the impact of the peer group should be taken into consideration as determining factors. It may be appropriate to examine the influence of 'relevant others' in detail through the child's individual social network[59]. In connection with the amount of Gaelic spoken by youngsters, Dorian (1981:107) postulated that "it may be older siblings or cousins or aunts or uncles of the parents who play the crucial role in this linguistic socialization". As regards the role of the social network, it is conceivable that it governs not only the amount of Frisian spoken, but also the kind of Frisian spoken.

Finally, it is important in case-studies not only to pay attention to young Frisian children's acquisition of their first language, but to broaden the scope and to focus on bilingual language development. How and why do transfer phenomena in both languages occur? Such questions can be tackled from psycholinguistic and sociolinguistic angles as well (see e.g. Fantini 1985).

Regarding Frisian as a second language it was found that a number of Dutch children taking part in our study actually could not speak Frisian in a native-like manner. This is in agreement with recent findings reported by De Jong and Riemersma (1994:119-125). As yet, that is not to say that no Dutch child living in Friesland is a fluent speaker of Frisian. It is highly relevant to take a closer

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[59] Recall the example of a Frisian child that was well aware of language forms used by her grandparents (see §4.5).

look at those additive bilinguals who do have a near-native command of spoken Frisian. In all probability these are the ones who really use the second language. The question is how these children moved from facilitative exposure to actual use. It is therefore important to chart closely their use of the second language. When and why do they use Frisian? A network perspective may again prove useful for answering such questions (cf. Cenoz and Valencia 1993).

Samenvatting

Fries als eerste en tweede taal. Sociolinguïstische en sociaal-psychologische aspecten van de verwerving van het Fries door Fries- en Nederlandstalige kinderen op de basisschool.

Hoofdstuk 1 vormt de inleiding op het onderzoek.
In Friesland is sprake van een aanzienlijke demolinguïstische vernederlandsing, die een sterk toegenomen taalcontact tussen Fries en Nederlands met zich meebrengt. De Friese taal komt onder steeds grotere druk van het Nederlands te staan.

Dit onderzoek is gericht op de verwerving van het Fries als eerste taal in een context van taalcontact en taalverandering. Door een vergelijking tussen het Fries van Friestalige kinderen en het Fries van een groep Friestalige ouders wordt geprobeerd om taalveranderingen in het Fries in kaart te brengen. Daarnaast is het ook de bedoeling om vast te stellen in hoeverre Nederlandstalige kinderen het Fries als tweede taal verwerven. Een ander doel van het onderzoek is om inzicht te krijgen in de sociaal-psychologische instelling van Nederlandstalige kinderen ten opzichte van het Fries. Die instelling kan gerelateerd zijn aan de verwerving van het Fries als tweede taal. Tenslotte wordt met deze studie ook een meer praktisch doel nagestreefd. Inzicht in het Fries als eerste en tweede taal en in de sociaal-psychologische instelling van Nederlandstalige kinderen ten opzichte van het Fries kan dienen als vertrekpunt voor initiatieven in het onderwijs.

Hoofdstuk 2 geeft de theoretische achtergrond van het onderzoek.
Het thema van deze studie is de verwerving van het Fries als eerste en tweede taal. De bestudeerde linguïstische variabelen worden in een informele context verworven. In dit onderzoek gaat de aandacht uit naar het door sociolinguïstische factoren bepaalde resultaat van eerste-taalverwerving.

Over het algemeen wordt aangenomen dat het succes van tweede-taalverwerving deels samenhangt met sociaal-psychologische factoren. In veel sociaal-psychologische theorieën worden taalattitude, motivatie en zelfvertrouwen als determinanten van tweede-taalverwerving aangemerkt. Naast deze affectieve leerderskenmerken wordt in sociaal-psychologische theorieën ook gewezen op het belang van de omgeving waarin de taalleerder de tweede taal verwerft, omdat de omgeving de input van de tweede taal bepaalt. De omgeving kan bovendien van invloed zijn op de sociaal-psychologische instelling van de taalleerder ten opzichte van de tweede taal.

Friestalige kinderen verwerven het Fries in een context van intensief taalcontact tussen Fries en Nederlands. Daarmee samenhangend is het Fries aan veranderingen onderhevig. De meningen ten aanzien van de rol van kindertaal in taalverandering verschillen sterk. In een situatie van intensief taalcontact kan de eerste taal onvolledig worden verworven.

Er wordt dikwijls onderscheid gemaakt tussen intra- en interlinguïstische veranderingen in taal. Bij intralinguïstische taalverandering gaat het om inherente ontwikkelingen in een taalsysteem. Interlinguïstische taalverandering is daarentegen het gevolg van contact tussen talen. In de praktijk is het echter lastig om

na te gaan of een bepaalde taalverandering zich voordoet als gevolg van interne of externe factoren. Vaak zal er sprake zijn van een wisselwerking tussen beide factoren.

Taalveranderingen vinden niet even gemakkelijk plaats op elk niveau van het taalsysteem. Over het algemeen wordt aangenomen dat naarmate een taalelement meer ingebed is in de taalstructuur, verandering minder waarschijnlijk wordt.

Nederlandstalige kinderen komen in Friesland in aanraking met het Fries. Hierdoor kunnen zij het Fries als tweede taal verwerven. In het onderzoek naar tweede-taalverwerving heeft men zich meestal bezig gehouden met de verwerving van een dominante tweede taal. Het deel van ons onderzoek dat zich richt op de verwerving van het Fries als tweede taal wijkt af van dat patroon.

In *hoofdstuk 3* worden de onderzoeksvragen geformuleerd en wordt de methode verantwoord die is gevolgd om de onderzoeksvragen te beantwoorden.

Dit onderzoek is gericht op de verwerving van het Fries bij Fries- en Nederlandstalige kinderen op de basisschool. Aandacht wordt besteed aan de kennis van specifieke kenmerken van het Fries bij de kinderen. Een aantal linguïstische variabelen is onderzocht, te weten (*a*) de vervoeging van *je*-werkwoorden, (*b*) verkleinwoordvorming, (*c*) verb-raising, (*d*) lexicale kennis en (*e*) breking.
Wat betreft het Fries als *eerste taal*, tracht het onderzoek een antwoord te geven op de volgende onderzoeksvragen:

a. Wat is de kennis van het Fries bij Friestalige kinderen?
b. Wat is de samenhang tussen de kennis van het Fries en de variabelen leeftijd, geslacht en taalomgeving?
c. Wat is de samenhang tussen de kennis van het Fries en de attitude van Friestalige kinderen ten opzichte van het Fries?
d. Verschilt de kennis van het Fries bij Friestalige kinderen ten opzichte van de kennis van het Fries bij Friestalige ouders?

Ten aanzien van het Fries als *tweede taal* staan de volgende onderzoeksvragen centraal:

a. Wat is de kennis van het Fries bij Nederlandstalige kinderen?
b. Wat is de samenhang tussen de kennis van het Fries en de variabelen leeftijd, geslacht en taalomgeving?
c. Wat is de sociaal-psychologische instelling van Nederlandstalige kinderen ten opzichte van het Fries in termen van hun attitude ten opzichte van het Fries, hun motivatie om het Fries te leren en hun zelfvertrouwen in het Fries?
d. Wat is de samenhang tussen de sociaal-psychologische instelling van Nederlandstalige kinderen ten opzichte van het Fries en de variabelen leeftijd, geslacht en taalomgeving?
e. Wat is de samenhang tussen de sociaal-psychologische instelling van Nederlandstalige kinderen ten opzichte van het Fries en die van Nederlandstalige ouders?
f. Wat is de samenhang tussen de sociaal-psychologische instelling van Nederlandstalige kinderen ten opzichte van het Fries en hun kennis van het Fries?

De verwerving van het Fries als tweede taal kan samenhangen met affectieve leerderskenmerken. Wat dat betreft, zijn de volgende sociaal-psychologische variabelen in de studie betrokken: (*a*) de attitude van de kinderen ten opzichte

van het Fries, (*b*) hun motivatie om het Fries te leren en (*c*) hun zelfvertrouwen in het Fries.

De 'taalomgeving' is ook van belang. Een overwegend Nederlandstalige omgeving kan negatief samenhangen met de verwerving van het Fries als eerste taal. Daarnaast kan een overwegend Friese taalomgeving de verwerving van het Fries als tweede taal bevorderen.

De variabele taalomgeving staat in dit onderzoek voor het percentage Friestalige kinderen op school. De scholen zijn naar taalomgeving in drie categorieën verdeeld:

A. de schoolpopulatie bestaat voor 10-25% uit Friestalige kinderen;
B. de schoolpopulatie bestaat voor 45-55% uit Friestalige kinderen;
C. de schoolpopulatie bestaat voor 75-90% uit Friestalige kinderen.

De taalverwerving is cross-sectioneel bestudeerd, waarbij een vergelijking tussen groep 5 en 8 van de basisschool is gemaakt. Om mogelijke taalveranderingen in het Fries in kaart te brengen, zijn de linguïstische variabelen onderzocht bij de oudste Friestalige kinderen en bij een aantal Friestalige ouders. Zo kon een intergenerationele vergelijking worden gemaakt.

In totaal hebben 410 kinderen aan het onderzoek meegewerkt; 202 kinderen waren van-huis-uit Friestalig en 208 kinderen hadden Nederlands als thuistaal. De kinderen zaten op 31 verschillende basisscholen, verspreid over de provincie. Verder omvatte het onderzoek een groep Friestalige ouders (n=52) en heeft een groep Nederlandstalige ouders (n=168) een vragenlijst ingevuld met betrekking tot hun taalattitude en de mate van motivationele ondersteuning van de kinderen om het Fries te leren.

Drie taaltoetsen (voor breking, lexicale kennis en verkleinwoordvorming) werden individueel en mondeling afgenomen. Twee taaltoetsen (voor vervoeging van *je*-werkwoorden en verb-raising) zijn schriftelijk en groepsgewijs afgenomen. De attitude ten opzichte van het Fries is gemeten met behulp van een vragenlijst (Likertschaal) en een matched-guise test. Een deel van de attitude-vragenlijst is ook voorgelegd aan de Nederlandstalige ouders. De variabelen motivatie (en waargenomen motivationele ondersteuning) en zelfvertrouwen zijn vastgesteld door een aangepaste versie van de *Attitude and Motivation Test Battery* (Gardner and Smythe:1981).

Tenslotte is de motivationele ondersteuning van de Nederlandstalige ouders nagegaan door middel van een vragenlijst.

In *hoofdstuk 4* worden de linguïstische gegevens geanalyseerd voor de eerder aangegeven vijf variabelen.

Breking. Veel Friestalige kinderen passen breking lang niet altijd toe. Gemiddeld breken de Friestalige kinderen 9.6 (van de 15) items. Er zijn grote verschillen tussen de prestaties op de items, en breking komt gemiddeld vaker voor bij de meervoudsvorm dan bij de verkleinwoordvorm.

Voor Nederlandstalige kinderen is breking kennelijk een bijzonder lastig te verwerven variabele. Gemiddeld breken de Nederlandstalige kinderen slechts 2.6 items.

Tenslotte is er een vergelijking gemaakt tussen onze onderzoeksgegevens en eerdere gegevens met betrekking tot breking bij basisschoolleerlingen in de *Dongeradielen*. Uit deze vergelijking komt naar voren dat breking bij de Friestalige *Dongeradielster* kinderen frequenter voorkomt dan bij onze Friestalige kinderen.

Verkleinwoordvorming. Het blijkt dat de Friestalige kinderen met een gemiddelde van 14.3 (van de 17 items) over het algemeen vrij goed scoren. Echter, een deel van deze kinderen (4%) gebruikt het standaard */ke/* suffix helemaal niet. Er zijn ook grote verschillen tussen de prestaties op de items.

Nederlandstalige kinderen scoren met een gemiddelde van 8.8 betrekkelijk laag. Dikwijls overgeneraliseren zij het het kenmerkende */ke/* suffix.

Vervoeging van je-werkwoorden. De gemiddelde score die de Friestalige kinderen behalen op de toets is 6.9 (maximum 9), en dat toont aan dat zij hier redelijk goed presteren. Niettemin zijn er tekenen die er op wijzen dat Friestalige kinderen toch ook onzeker zijn ten aanzien van de vervoeging van *je*-werkwoorden. Zij vervoegen soms een een *e*-werkwoord als *je*-werkwoord en andersom.

Het gemiddelde van 4.4 laat zien dat Nederlandstalige kinderen de vervoeging van *je*-werkwoorden in geringe mate beheersen.

Lexicale kennis. Op de toets voor de productieve woordenschat Fries doen de Friestalige kinderen het over het algemeen goed. Gemiddeld behalen Friestalige kinderen een score van 31.9 (maximum 34). Niettemin komen we verscheidene woorden tegen die aan het Nederlands zijn ontleend.

De gemiddelde score van de Nederlandstalige kinderen bedraagt 18.2. Gezien de maximaal haalbare score (34) is dat een vrij gering resultaat. De lexicale kennis van het Fries bij Nederlandstalige kinderen varieert sterk.

Verb-raising. De resultaten op de toets voor verb-raising tonen aan dat Friestalige kinderen vaak niet de standaard volgorde aanhouden in de werkwoordelijke eindreeks. De spreiding van hun scores is groot. Gemiddeld passen ze in ongeveer de helft van de gevallen (gemiddelde 4.11, maximum 8) de standaard Friese volgorde toe.

Nederlandstalige kinderen scoren over het algemeen ook laag. Hun gemiddelde bedraagt 3.13.

Op grond van bovenstaande vijf linguïstische variabelen kon een algemene index voor kennis van het Fries worden geconstrueerd. Deze index is vervolgens gerelateerd aan de onafhankelijke variabelen leeftijd, geslacht en taalomgeving.

Bij de Friestalige kinderen blijkt dat alleen hun leeftijd van invloed is op de scores op de index. Oudere Friestalige kinderen scoren hoger dan jongere kinderen. Bij de Nederlandstalige kinderen komt naar voren dat zij beduidend hoger scoren op de index als ze ouder zijn. Bovendien stijgen hun scores op de index naarmate hun omgeving sterker Friestalig is. Tenslotte is de score van de Nederlandstalige meisjes gemiddeld hoger dan die van de jongens.

Om mogelijke intergenerationele taalveranderingen in het Fries in kaart te brengen, is een vergelijking gemaakt tussen de kennis van het Fries bij de oudste Friestalige kinderen (groep 8) en een groep Friestalige ouders. Deze vergelijking maakt duidelijk dat de ouders op elke onderzochte linguïstische variabele meer standaard Fries produceren dan de kinderen. De verschillen zijn vooral groot ten aanzien van de variabelen verkleinwoordvorming (in het bijzonder de */ke/* items), breking en verb-raising.

Nagegaan is vervolgens in welke mate Nederlandstalige kinderen die relatief hoog scoren op de index 'kennis van het Fries' het Fries vloeiend en correct kunnen spreken. Dit blijkt nauwelijks het geval te zijn.

In *hoofdstuk 5* worden de sociaal-psychologische gegevens geanalyseerd.

Taalattitudes van de Nederlandstalige kinderen. De attitude van de kinderen ten opzichte van het Fries is onderzocht met behulp van een vragenlijst (Likert-schaal) en de matched-guise techniek. Op de items in de vragenlijst is factoranalyse toegepast. Daaruit komen twee factoren naar voren: een algemene attitude ten opzichte van het Fries en een attitude ten opzichte van het mondeling gebruik van het Fries (taalgebruiksattitude). De algemene attitude van Nederlandstalige kinderen ten opzichte van het Fries is vrij negatief.

Op de beoordelingsitems van de matched-guise test is eveneens factoranalyse toegepast. Dat resulteerde in drie dimensies: (*a*) solidariteit, (*b*) sociale status en (*c*) economische status. De sociale beoordeling van het Fries door de Nederlandstalige kinderen blijkt tamelijk vlak te zijn.

Taalattitudes van Nederlandstalige ouders. De Nederlandstalige ouders staan over het algemeen niet bepaald positief tegenover het Fries. Hun taalattitude is vergelijkbaar met die van hun kinderen. Bovendien is er een samenhang tussen de taalattitude van de kinderen en hun ouders.

Motivatie en zelfvertrouwen. Door middel van een vragenlijst is de motivatie van Nederlandstalige kinderen om Fries te leren en hun zelfvertrouwen in het Fries onderzocht. Op de items in deze vragenlijst is opnieuw factoranalyse toegepast. Op basis hiervan konden vier factoren worden aangewezen: (*a*) motivatie, (*b*) waargenomen motivationele ondersteuning van ouders, (*c*) waargenomen motivationele ondersteuning van de tweede-taalgroep en (*d*) zelfvertrouwen.

Motivatie. De motivatie van Nederlandstalige kinderen om het Fries als tweede taal te leren blijkt gering te zijn. Bovendien is hun motivatie beduidend minder aan het eind van de basisschool (groep 8) dan in groep 5. Het valt op dat de motivatie om het Fries te leren niet samenhangt met de taalomgeving van de kinderen.

Waargenomen motivationele ondersteuning van ouders. De Nederlandstalige kinderen ervaren over het algemeen weinig motivationele ondersteuning van hun ouders. Verder blijkt dat de door de Nederlandstalige kinderen waargenomen motivationele ondersteuning van ouders overeenkomt met de mate waarin Nederlandstalige ouders zelf aangeven hun kinderen daadwerkelijk motivationeel te ondersteunen.

Waargenomen motivationele ondersteuning van de tweede-taalgroep. De Nederlandstalige kinderen ervaren over het algemeen ook weinig motivationele ondersteuning van de tweede-taalgroep (bestaande uit 'Friese kinderen uit mijn klas' en 'Friese mensen').

Zelfvertrouwen. Gelet op hun betrekkelijk geringe kennis van het Fries is het opmerkelijk dat een meerderheid van de Nederlandstalige kinderen aangeeft niet onzeker te zijn in het Fries.

Voorts is aandacht besteed aan de mogelijke samenhang tussen de verschillende sociaal-psychologische variabelen. Gardner's (1985) socio-opvoedkundig model van tweede-taalverwerving gaat ervan uit dat de kernvariabele motivatie wordt bepaald door taalattitudes en door de motivationele ondersteuning die tweede-taalleerders ervaren van de tweede-taalgroep en de ouders. Beide assumpties zijn onderzocht. Het verband tussen taalattitudes en motivatie wordt door onze onderzoeksgegevens niet aangetoond. Daarentegen is het verband tussen waargenomen motivationele ondersteuning van de tweede-taalgroep en van ouders enerzijds en motivatie anderzijds wel aantoonbaar.

Ook is gekeken naar de mogelijke samenhang tussen sociaal-psychologische variabelen en de kennis van het Fries. Zowel bij de Nederlandstalige kinderen als bij de Nederlandstalige ouders is nagegaan of de algemene attitude ten opzichte van het Fries gerelateerd was aan de door hen zelf ingeschatte taalvaardigheid Fries in termen van de basisvaardigheden verstaan, spreken, lezen en schrijven. Ten aanzien van beide groepen - kinderen en ouders - bleek de taalattitude positief samen te hangen met de inschatting van de vier taalvaardigheden. De correlaties waren bij de kinderen echter steeds beduidend hoger.

Wat betreft de Nederlandstalige kinderen is de samenhang tussen alle onderzochte sociaal-psychologische variabelen enerzijds en de scores op de index 'kennis van het Fries' anderzijds nagegaan. Het blijkt dat alleen de algemene taalattitude van de Nederlandstalige kinderen en hun zelfvertrouwen verband houden met de scores op de index. De andere affectieve leerderskenmerken vertonen echter nauwelijks enige samenhang met de scores op de index. Een regressie-analyse maakt tenslotte duidelijk dat de voorspellende waarde van de variabelen algemene taalattitude en zelfvertrouwen geringer is dan de voorspellende waarde van de variabelen leeftijd en taalomgeving.

Als laatste is onderzocht of de taalattitude van Friestalige kinderen samenhangt met de kennis van het Fries. Dat bleek nauwelijks het geval te zijn.

In *hoofdstuk 6* worden de onderzoeksresultaten samengevat en besproken. Ook wordt een beknopte evaluatie van de studie gegeven en wordt een aantal suggesties voor nader onderzoek genoemd.

Een belangrijk doel van de studie is het bestuderen van de verwerving van het Fries als eerste taal en het verkrijgen van inzicht in de rol van onvolledige eerste-taalverwerving als bron van taalverandering. De linguïstische gegevens getuigen ervan dat de verwerving van standaard Fries lijkt te worden bemoeilijkt door de taalcontactsituatie waarin Friestalige kinderen zich bevinden. Een vertraagde of gestagneerde eerste-taalverwerving is aanwijsbaar bij de variabelen breking, verkleinwoordvorming en verb-raising. De huidige taalcontactsituatie is uiteindelijk bepalend voor de vertraagde of stagnerende eerste-taalverwerving. Het is wat dat betreft opmerkelijk dat de kennis van standaard Fries bij de Friestalige kinderen niet samenhangt met de mate waarin hun omgeving Fries- dan wel Nederlandstalig is. Kennelijk is het Nederlands in tweetalig Friesland zo alomtegenwoordig dat de factor taalomgeving niet nader differentieert.

Een ander doel van het onderzoek was om inzicht te krijgen in de sociaal-psychologische instelling van Nederlandstalige kinderen ten opzichte van het Fries en om na te gaan of deze instelling samenhangt met de kennis van het Fries als tweede taal. Uit het onderzoek is naar voren gekomen dat de sociaal-psychologische instelling van Nederlandstalige kinderen ten opzichte van het Fries over het algemeen vrij negatief is. Op theoretische gronden namen we aan dat de affectieve leerderskenmerken taalattitude, motivatie en zelfvertrouwen duidelijk samenhangen met de mate van tweede-taalverwerving. Onze onderzoeksgegevens vormen echter geen bevestiging van deze aanname.

Gearfetting

Frysk as earste en twadde taal. Sosjolingwistyske en sosjaal-psychologyske aspekten fan de ferwerving fan it Frysk troch Frysk- en Nederlânsktalige bern op de basisskoalle.

Haadstik 1 foarmet de ynlieding op it ûndersyk.
Yn Fryslân is sprake fan in dúdlike demolingwistyske fernederlânsking, dy't in sterk tanommen taalkontakt tusken Frysk en Nederlânsk mei him meibringt. De Fryske taal komt ûnder in hieltyd gruttere druk fan it Nederlânsk te stean.

Dit ûndersyk is rjochte op de ferwerving fan it Frysk as earste taal yn in kontekst fan taalkontakt en taalferoaring. Troch in ferliking tusken it Frysk fan Frysktalige bern en it Frysk fan Frysktalige âlden wurdt besocht om taalferoaringen yn it Frysk yn kaart te bringen. Dêrneist is it ek de bedoeling om fêst te stellen yn hoefier't Nederlânsktalige bern har it Frysk as twadde taal eigen meitsje. In oar doel fan it ûndersyk is om ynsjoch te krijen yn 'e sosjaal-psychologyske ynstelling fan Nederlânsktalige bern foar it Frysk oer. Dy ynstelling kin relatearre wêze oan de ferwerving fan it Frysk as twadde taal. As lêste wurdt mei dizze stúdzje ek in mear praktysk doel neistribbe. Ynsjoch yn it Frysk as earste en twadde taal en yn 'e sosjaal-psychologyske ynstelling fan Nederlânsktalige bern foar it Frysk oer kin tsjinje as begjinpunt foar inisjativen yn it ûnderwiis.

Haadstik 2 jout de teoretyske achtergrûn fan it ûndersyk.
It tema fan dizze stúdzje is de ferwerving fan it Frysk as earste en twadde taal. De bestudearre lingwistyske fariabelen wurde yn in ynformele kontekst ferwurven. Yn dit ûndersyk wurdt omtinken jûn oan it troch sosjolingwistyske faktoaren bepaalde resultaat fan earste-taalferwerving.

Oer it algemien wurdt oannommen dat it sukses fan twadde-taalferwerving foar in part gearhinget mei sosjaal-psychologyske faktoaren. Yn in soad sosjaal-psychologyske teoryen wurde taalattitude, motivaasje en selsfertrouwen as determinanten fan twadde-taalferwerving sjoen. Neist dy affektive skaaimerken fan 'e learder wurdt yn sosjaal-psychologyske teoryen ek wiisd op it belang fan 'e omjouwing dêr't de taallearder de twadde taal yn ferwerft, omdat de omjouwing de input fan 'e twadde taal bepaalt. De omjouwing kin boppedat fan ynfloed wêze op de sosjaal-psychologyske ynstelling fan 'e taallearder foar de twadde taal oer.

Frysktalige bern meitsje har it Frysk eigen yn in kontekst fan yntinsyf taalkontakt tusken Frysk en Nederlânsk. Dêrmei gearhingjend hat it Frysk mei taalferoaringen te krijen. De mieningen oer de rol fan bernetaal yn taalferoaring ferskille gâns. Yn in situaasje fan taalkontakt kin de earste taal ûnfolslein ferwurven wurde.

Der wurdt gauris ûnderskied makke tusken yntra- en ynterlingwistyske feroaringen yn taal. By yntralingwistyske feroaringen giet it om ynherinte ûntwikkelingen yn in taalsysteem. Ynterlingwistyske taalferoaring is dêrfoaroer it gefolch fan kontakt tusken talen. Yn 'e praktyk is it lykwols net maklik nei te gean oft in bepaalde taalferoaring him foardocht as gefolch fan ynterne of eksterne faktoaren. Der sil faak sprake wêze fan in wikselwurking tusken beide faktoaren.

Taalferoaringen fine net like maklik plak op alle nivo's fan it taalsysteem. Oer it algemien wurdt oannommen dat al neigeraden in taalelemint mear ynbêde is yn 'e taalstruktuer, feroaring minder wierskynlik wurdt.

Nederlânsktalige bern komme yn Fryslân yn oanrekking mei it Frysk. Dêrtroch kinne se it Frysk as twadde taal ferwerve. It ûndersyk nei twadde-taalferwerving hat him meastentiids dwaande hâlden mei de ferwerving fan in dominante twadde taal. It part fan ús ûndersyk dat him rjochtet op de ferwerving fan it Frysk as twadde taal wykt ôf fan dat patroan.

Yn *haadstik 3* wurde de ûndersyksfragen formulearre en wurdt de metoade ferantwurde dy't folge is om de ûndersyksfragen te beäntwurdzjen.

Dit ûndersyk is rjochte op de ferwerving fan it Frysk by Frysk- en Nederlânsktalige bern op de basisskoalle. Der wurdt omtinken jûn oan de kennis fan bepaalde lingwistyske skaaimerken fan it Frysk by de bern. In oantal lingwistyske fariabelen is ûndersocht, nammentlik (*a*) de bûging fan *je*-tiidwurden, (*b*) ferlytsingsfoarming, (*c*) verb-raising, (*d*) leksikale kennis en (*e*) brekking.

Wat it Frysk as *earste taal* oanbelanget, wol it ûndersyk in antwurd jaan op de folgjende ûndersyksfragen:

a. Wat is de kennis fan it Frysk by Frysktalige bern?
b. Wat is de gearhing tusken de kennis fan it Frysk en de fariabelen leeftyd, geslacht en taalomjouwing?
c. Wat is de gearhing tusken de kennis fan it Frysk en de hâlding fan 'e Frysktalige bern foar it Frysk oer?
d. Ferskilt de kennis fan it Frysk by de Frysktalige bern neffens de kennis fan it Frysk by Frysktalige âlden?

Wat it Frysk as *twadde taal* oangiet, steane de folgjende ûndersyksfragen sintraal:

a. Wat is de kennis fan it Frysk by Nederlânsktalige bern?
b. Wat is de gearhing tusken de kennis fan it Frysk en de fariabelen leeftyd, geslacht en taalomjouwing?
c. Wat is de sosjaal-psychologyske ynstelling fan Nederlânsktalige bern foar it Frysk oer neffens har hâlding foar it Frysk oer, har motivaasje om it Frysk te learen en har selsfertrouwen yn it Frysk?
d. Wat is de gearhing tusken de sosjaal-psychologyske ynstelling fan Nederlânsktalige bern foar it Frysk oer en de fariabelen leeftyd, geslacht en taalomjouwing?
e. Wat is de gearhing tusken de sosjaal-psychologyske ynstelling fan Nederlânsktalige bern foar it Frysk oer en dy fan Nederlânsktalige âlden?
f. Wat is de gearhing tusken de sosjaal-psychologyske ynstelling fan Nederlânsktalige bern foar it Frysk oer en har kennis fan it Frysk?

It jin eigen meitsjen fan it Frysk as twadde taal kin gearhingje mei affektive skaaimerken fan 'e learder. Wat dat oangiet, binne de folgjende sosjaal-psychologyske fariabelen yn it ûndersyk behelle: (*a*) de hâlding fan 'e bern foar it Frysk oer, (*b*) har motivaasje om it Frysk te learen en (*c*) har selsfertrouwen yn it Frysk.

De 'taalomjouwing' is ek fan belang. In foar't meastepart Nederlânsktalige omjouwing kin negatyf gearhingje mei de ferwerving fan it Frysk as earste taal.

Dêrneist kin in fierwei Fryske taalomjouwing de ferwerving fan it Frysk as twadde taal befoarderje.

De fariabele taalomjouwing hat yn dit ûndersyk te krijen mei it persintaazje Frysktalige bern op skoalle. De skoallen binne neffens taalomjouwing ferdield yn trije kategoryen:

A. de skoallepopulaasje bestiet foar 10-25% út Frysktalige bern;
B. de skoallepopulaasje bestiet foar 45-55% út Frysktalige bern;
C. de skoallepopulaasje bestiet foar 75-90% út Frysktalige bern.

De taalferwerving is cross-seksjoneel bestudearre, wêrby't in ferliking tusken groep 5 en 8 fan 'e basisskoalle makke is. Om mooglike taalferoaringen yn it Frysk yn kaart te bringen, binne de lingwistyske fariabelen ûndersocht by de âldste Frysktalige bern en by in tal Frysktalige âlden. Sa koe in yntergenerasjonele ferliking makke wurde.

Mei-inoar ha 410 bern oan it ûndersyk meiwurke; 202 bern wiene fan-hûs-út Frysktalich en 208 bern hiene Nederlânsk as thústaal. De bern sieten op 31 ferskillende basisskoallen, ferspraat oer de provinsje. Fierders omfieme it ûndersyk in groep Frysktalige âlden (n=52) en hat in groep Nederlânsktalige âlden (n=168) in fragelist ynfold oer har hâlding foar it Frysk oer en de mjitte fan motivasjonele stipe fan 'e bern om it Frysk te learen.

Trije taaltoetsen (foar brekking, leksikale kennis en ferlytsingsfoarming) waarden yndividueel en mûnling ôfnommen. Twa taaltoetsen (foar de bûging fan *je*-tiidwurden en verb-raising) binne skriftlik en groepsgewiis ôfnommen.

De hâlding foar it Frysk oer is metten mei help fan in fragelist (Likertskaal) en in matched-guise test. In part fan 'e taalhâldingsfragelist is ek foarlein oan de Nederlânsktalige âlden. De fariabelen motivaasje (en waarnommen motivasjonele stipe) en selsfertrouwen binne fêststeld troch in oanpaste ferzje fan de *Attitude and Motivation Test Battery* (Gardner and Smythe:1981).

As lêste is de motivasjonele stipe fan 'e Nederlânsktalige âlden neigien mei help fan in fragelist.

Yn *haadstik 4* wurde de lingwistyske gegevens analisearre foar de earderneamde fiif fariabelen.

Brekking. In soad Frysktalige bern passe de brekking lang net altyd ta. Trochinoar brekke de Frysktalige bern 9.6 (fan 'e 15) items. Der binne grutte ferskillen tusken de prestaasjes op de items, en brekking komt faker foar by de meartalsfoarm as by de ferlytsingsfoarm.

Foar Nederlânsktalige bern is brekking sa't liket in hiel lestich te ferwerven fariabele. Trochinoar brekke de Nederlânsktalige bern mar 2.6 items.

As lêste is der in ferliking makke tusken ús ûndersyksgegevens en eardere gegevens oer brekking by basisskoallebern yn 'e Dongeradielen. Ut dy ferliking docht bliken dat brekking by de Frysktalige Dongeradielster bern frekwinter foarkomt as by ús Frysktalige bern.

Ferlytsingsfoarming. It docht bliken dat de Frysktalige bern mei in gemiddelde fan 14.3 (fan 'e 17 items) oer it algemien frij goed skoare op de toets. Lykwols, in part fan dy bern (4%) brûkt it standert */ke/* suffiks hielendal net. Der binne ek grutte ferskillen tusken de prestaasjes op de items.

Nederlânsktalige bern skoare mei in gemiddelde fan 8.8 frij leech. It komt gauris foar dat se it karakteristike */ke/* suffiks oergeneralisearje.

Bûging fan je-tiidwurden. De gemiddelde skoare dy't de Frysktalige bern helje

op de toets is 6.9 (maksimum 9), en dat toant oan dat sy hjir ridlik goed prestearje. Dochs binne der oanwizingen dat Frysktalige bern ek wol ûnwis binne wat de bûging fan *je*-tiidwurden oanbelanget. Soms bûgje se in *e*-tiidwurd as *je*-tiidwurd en oarsom.

It gemiddelde fan 4.4 lit sjen dat Nederlânsktalige bern de bûging fan *je*-tiidwurden mar min behearskje.

Leksikale kennis. Op 'e toets foar de produktive wurdskat Frysk dogge de Frysktalige bern it oer it algemien goed. Trochinoar helje se in skoare fan 31.9 (maksimum 34). Likegoed komme wy ûnderskate wurden tsjin dy't oan it Nederlânsk ûntliend binne.

De gemiddelde skoare fan 'e Nederlânsktalige bern is 18.2. Mei it each op de maksimaal helbere skoare (34) is dat in frij meager resultaat. De leksikale kennis fan it Frysk farieart sterk by de Nederlânsktalige bern.

Verb-raising. De resultaten op 'e toets foar verb-raising toane oan dat Frysktalige bern faak net de standert folchoarder oanhâlde yn 'e tiidwurdkloften. De sprieding fan de skoares is grut. Yn trochsneed passe se yn ûngefear de helte fan de gefallen (gemiddelde 4.11, maksimum 8) de standert Fryske folchoarder ta.

De Nederlânsktalige bern skoare oer it algemien ek leech. Har gemiddelde is 3.13.

Op grûn fan boppesteande fiif lingwistyske fariabelen koe in algemiene yndeks foar kennis fan it Frysk konstruearre wurde. Dy yndeks is dêrnei relatearre oan de ûnôfhinklike fariabelen leeftyd, geslacht en taalomjouwing.

By de Frysktalige bern docht bliken dat allinne har leeftyd fan ynfloed is op 'e skoares op de yndeks. Aldere Frysktalige bern skoare heger as jongere bern. By de Nederlânsktalige bern komt nei foaren dat se folle heger skoare op de yndeks at se âlder binne. Boppedat nimme har skoares ta neigeraden har taalomjouwing mear Frysktalich is. As lêste is de skoare fan de Nederlânsktalige famkes trochinoar heger as dy fan de jonges.

Om mooglike yntergenerasjonele taalferoaringen yn it Frysk yn kaart te bringen, is in ferliking makke tusken de kennis fan it Frysk by de âldste Frysktalige bern (groep 8) en in groep Frysktalige âlden. Dy ferliking makket dúdlik dat de âlden op alle ûndersochte lingwistyske fariabelen mear standertfrysk produsearje as de bern. De ferskillen binne benammen grut by de fariabelen ferlytsingsfoarming (foaral de */ke/* items), brekking en verb-raising.

Dêrnei is neigien yn hoefier't Nederlânsktalige bern dy't relatyf heech skoare op de yndeks foar kennis fan it Frysk, it Frysk floeiend en korrekt prate kinne. Dat blykt amper it gefal te wêzen.

Yn *haadstik 5* wurde de sosjaal-psychologyske gegevens analisearre.

Taalhâlding fan Nederlânsktalige bern. De hâlding fan de bern is ûndersocht mei help fan in fragelist (Likertskaal) en de matched-guise technyk. Op de items yn 'e fragelist is faktoranalyze tapast. Dêr komme twa faktoaren út: in algemiene hâlding foar it Frysk oer en in hâlding foar it mûnling brûken fan it Frysk oer (taalgebrûkshâlding). De algemiene hâlding fan Nederlânsktalige bern foar it Frysk oer is frij negatyf.

Op de beoardielingsitems fan de matched-guise test is ek faktoranalyze tapast.

Dat resultearre yn trije diminsjes: (*a*) solidariteit, (*b*) sosjale status en (*c*) ekonomyske status. De sosjale beoardieling fan it Frysk troch de Nederlânsktalige bern blykt frij flak te wêzen.

Taalhâlding fan Nederlânsktalige âlden. De Nederlânsktalige âlden steane oer it generaal net bepaald posityf foar it Frysk oer. Har taalhâlding is ferlykber mei dy fan har bern. Boppedat is der in gearhing tusken de taalhâlding fan de bern en har âlden.

Motivaasje en selsfertrouwen. Mei help fan in fragelist is de motivaasje fan Nederlânsktalige bern om Frysk te learen en har selsfertrouwen yn it Frysk ûndersocht. Op de items yn dizze fragelist is ek wer faktoranalyze tapast. Op basis dêrfan koene fjouwer faktoaren oanwiisd wurde: (*a*) motivaasje, (*b*) waarnommen motivasjonele stipe fan âlden, (*c*) waarnommen motivasjonele stipe fan de twadde-taalgroep en (*d*) selsfertrouwen.

Motivaasje. De motivaasje fan Nederlânsktalige bern om it Frysk as twadde taal te learen blykt lyts te wêzen. Boppedat is har motivaasje dúdlik minder oan 'e ein fan de basisskoalle (groep 8) as yn groep 5. It falt op dat de motivaasje om it Frysk te learen net gearhinget mei de taalomjouwing fan de bern.

Waarnommen motivasjonele stipe fan âlden. De Nederlânsktalige bern ûnderfine oer it algemien net in soad motivasjonele stipe fan har âlden. Fierders blykt dat de troch de Nederlânsktalige bern waarnommen motivasjonele stipe fan âlden oerienkomt mei de motivasjonele stipe dy't Nederlânsktalige âlden sels oanjouwe.

Waarnommen motivasjonele stipe fan de twadde-taalgroep. De Nederlânsktalige bern ûnderfine oer it algemien ek net in soad motivasjonele stipe fan de twadde-taalgroep (dy't bestiet út 'Fryske bern út myn klasse' en 'Fryske minsken').

Selsfertrouwen. Mei it each op har betreklik behyplike kennis fan it Frysk is it opmerklik dat in mearderheid fan de Nederlânsktalige bern oanjout dat se net ûnwis binne yn it Frysk.

Der is ek omtinken jûn oan de mooglike gearhing tusken de ferskillende sosjaal-psychologyske fariabelen. Gardner's (1985) sosjo-opfiedkundich model fan twadde-taalferwerving giet derfan út dat de kearnfariabele motivaasje bepaald wurdt troch taalhâlding en troch de motivasjonele stipe dy't twadde-taallearders ûnderfine fan de twadde-taalgroep en de âlden. Beide oannames binne neiriden. It ferbân tusken taalhâlding en motivaasje wurdt net oantoand troch ús ûndersyksgegevens. Dêrfoaroer is it ferbân tusken waarnommen motivasjonele stipe fan de twadde-taalgroep en fan de âlden oan 'e iene kant en motivaasje oan 'e oare kant wol oantoanber.

Der is ek sjoen nei de mooglike gearhing tusken sosjaal-psychologyske fariabelen en de kennis fan it Frysk. Sawol by de Nederlânsktalige bern as by de Nederlânsktalige âlden is neigien oft de algemiene hâlding foar it Frysk oer ferbân hâld mei de troch harsels ynskatten taalfeardichheid Frysk, en dan gie it om de basisfeardichheden ferstean, praten, lêzen en skriuwen. Foar beide groepen - bern en âlden - die bliken dat de taalhâlding posityf gearhong mei de ynskatting fan de fjouwer taalfeardichheden. De korrelaasjes wiene by de bern lykwols gâns heger.

Wat de Nederlânsktalige bern oanbelanget, is de gearhing tusken alle ûndersochte sosjaal-psychologyske fariabelen oan 'e iene kant en de skoares op de yndeks kennis fan it Frysk oan 'e oare kant neigien. It blykt dat allinne de algemiene hâlding fan de Nederlânsktalige bern foar it Frysk oer en har sels-

fertrouwen ferbân hâlde mei de skoares op de yndeks. De oare affektive skaaimerken fan de learder hingje lykwols amper gear mei de skoares op de yndeks. In regressy-analyze makket as lêste dúdlik dat de foarsizzende krêft fan de fariabelen algemiene taalhâlding en selsfertrouwen minder is as dy fan de fariabelen leeftyd en taalomjouwing.

As lêste is ûndersocht oft de hâlding fan Frysktalige bern foar it Frysk oer gearhinget mei de kennis fan it Frysk. Dat blykt amper it gefal te wêzen.

Yn *haadstik 6* wurde de ûndersyksresultaten gearfette en besprutsen. Der wurdt ek in koarte evaluaasje fan de stúdzje jûn en as lêste wurdt in tal suggestjes foar neier ûndersyk neamd.

In wichtich doel fan de stúdzje is it bestudearjen fan de ferwerving fan it Frysk as earste taal en it ynsjoch krijen yn de rol fan ûnfolsleine taalferwerving as boarne fan taalferoaring. De lingwistyske gegevens wize derop dat de ferwerving fan standertfrysk behindere wurdt troch de taalkontaktsituaasje dêr't Frysktalige bern yn ferkeare. In fertrage of stagnearre earste-taalferwerving is oanwiisber by de fariabelen brekking, ferlytsingsfoarming en verb-raising. De hjoeddeiske taalkontaktsituaasje is úteinlik beskiedend foar de fertrage of stagnearjende earste-taalferwerving. It is yn dat ferbân opmerklik dat de kennis fan standertfrysk by de Frysktalige bern net gearhinget mei de mjitte wêryn't har omjouwing Frysk- of Nederlânsktalich is. Sa't it liket is it Nederlânsk yn twatalich Fryslân sa rûnombywêzich dat de faktor taalomjouwing net neier differinsjearret.

In oar doel fan it ûndersyk wie om ynsjoch te krijen yn de sosjaal-psychologyske ynstelling fan Nederlânsktalige bern foar it Frysk oer en om nei te gean oft dy ynstelling gearhinget mei de kennis fan it Frysk as twadde taal. Ut it ûndersyk is nei foaren kommen dat de sosjaal-psychologyske ynstelling fan Nederlânsktalige bern foar it Frysk oer frijwat negatyf is. Op teoretyske grûn namen wy oan dat de affektive skaaimerken fan de learder taalhâlding, motivaasje en selsfertrouwen dúdlik gearhingje mei de mjitte fan twadde-taalferwerving. Us ûndersyksgegevens befêstigje dy oanname net.

Appendices

Appendix I: Test *je*-verb conjugation

1 *Ik* ...(betalen)... *juster mei in bryfke fan 25.*
- ☐ betelde
- ☐ betel
- ☐ betelje
- ☐ betelle

2 *Jan* ...(gapen)... *de hiele jûn al.*
- ☐ gapt
- ☐ gappet
- ☐ gapjet
- ☐ gapje

3 *Ik* ...(zoeken)... *om myn fyts.*
- ☐ sykje
- ☐ sike
- ☐ syk
- ☐ sykjen

4 *Pas op, wy* ...(zakken)... *troch it iis*!
- ☐ sakjen
- ☐ sakke
- ☐ sakje
- ☐ sakken

5 *Wy* ...(bakken)... *moarn pankoeken.*
- ☐ bakken
- ☐ bakje
- ☐ bakke
- ☐ bakjen

6 *Jimme* ...(tekenen)... *juster in snieman.*
- ☐ tekenen
- ☐ tekenden
- ☐ tekenjen
- ☐ tekene

7 *Kinsto dat plankje goed fêst* ...(timmeren)...?
- ☐ timmerjen
- ☐ timmerje
- ☐ timmere
- ☐ timmeren

8 *Peter sil dy wedstryd wol net* ...(winnen)...
- ☐ winje
- ☐ winnen
- ☐ winne
- ☐ winjen

9 *Frank* ...(wonen)... *earst yn Hilversum.*
- ☐ wenne
- ☐ wende
- ☐ wen
- ☐ wenje

10 *Wim* ...(vertellen)... *in mop.*
- ☐ ferteljet
- ☐ fertellet
- ☐ fertelje
- ☐ fertelt

11 *Do* ...(halen)... *juster tefolle sinaasappels op.*
- ☐ heljest
- ☐ helde
- ☐ hellest
- ☐ heldest
- ☐ helst

12 *Wat aardich dasto in ijsko foar my* ...(kopen)...
- ☐ keapest
- ☐ keapst
- ☐ keapt
- ☐ keapet
- ☐ keapjet
- ☐ keapjest

13 *Hasto dyn keamer al* ...(opruimen)...?
- ☐ opromd
- ☐ opromje
- ☐ opgeromd
- ☐ opgeromje
- ☐ opromme
- ☐ opgeromme

Appendix II: Test verb-raising

falle - litten - litte - fallen
Pas op! Do moatst dy faas net _____ _____ (1)

kinne - kommen - komme - kinnen
Do soest ek wol op myn feestje _____ _____ (2)

sjonge - hearren - hearre - sjongen
Ik wol Madonna graach ris yn it echt _____ _____ (3)

bliuwe - lizzen - lizze - bliuwen
Dat boek kin dêr wol _____ _____ (4)

helpe - moatte - moatten - helpen
Klaas hie syn lytse suske _____ _____ (5)

litten - falle - fallen - litte
Ho! Dêr hie ik myn bril hast _____ _____ (6)

rinnen - sjen - sjoen - rinne
Ik ha juf yn de stêd _____ _____ (7)

bleaun - lizze - lizzen - bliuwe
Jan is te lang op bêd _____ _____ (8)

Appendix III: Questionnaire language attitudes

1 *Als er elke dag Friese programma's op televisie komen, ga je daar dan naar kijken*?
(If there were Frisian programmes on television everyday, would you watch them?)
☐ altijd
☐ vaak
☐ soms
☐ bijna nooit
☐ nooit

2 *Welke stikker zou jij het liefst op je fiets plakken*?
(Which sticker would you most like to stick on your bike?)
☐ Fryslân ♥ boppe!
☐ Ik ♥ Fryslân
☐ Ik ♥ Friesland
☐ Ik ♥ Holland

3 *Hoe vind jij het als je meer Friese les op school zou krijgen*?
(How would you like it if you got more Frisian lessons at school?)
☐ helemaal niet leuk
☐ niet leuk
☐ gaat wel
☐ leuk
☐ heel leuk

4 *Bouke is een jongen die thuis altijd Fries spreekt. Hij loopt over straat. Er stopt een automobilist die hem in het Nederlands de weg vraagt. Wat vind jij, moet Bouke Fries of Nederlands tegen die automobilist spreken*?
(Bouke is a boy who always speaks Frisian at home. He is walking in the street. A motorist stops and asks him for the way in Dutch. What do you think, should Bouke speak Frisian or Dutch to that motorist?)
☐ Nederlands, dat weet ik zeker
☐ Nederlands, denk ik
☐ Nederlands of Fries, maakt niet uit
☐ Fries, denk ik
☐ Fries, dat weet ik zeker

5 *Hoe vind jij het als je juf of meester bijna altijd Fries zou spreken bij de rekenles*?
(How would you like it if your teacher was to speak nearly always in Frisian during arithmetic lessons?)
☐ heel leuk
☐ leuk
☐ gaat wel
☐ niet leuk
☐ helemaal niet leuk

6 *Vind jij de Friese taal lelijk of mooi*?
(In your opinion, is the Frisian language ugly or beautiful?)
☐ heel lelijk
☐ lelijk
☐ gaat wel
☐ mooi
☐ heel mooi

7 *Wat vind jij van jezelf*?
(How do you see yourself?)
☐ ik voel me Fries
☐ ik voel me Fries, en ook Nederlander
☐ ik voel me Nederlander, en ook Fries
☐ ik voel me Nederlander

8 *Welk plaatsnaambord vind jij dat er bij de hoofdstad moet staan*?
(Which sign do you think should be posted as you enter the capital?)
☐ Leeuwarden
☐ Leeuwarden/Ljouwert
☐ Ljouwert/Leeuwarden
☐ Ljouwert

9 *Froukje is een meisje dat thuis altijd Nederlands spreekt. Zij loopt in de gang van school. Er is een meneer met een koffertje in z'n hand. Die vraagt haar in het Fries waar het hoofd van de school is. Wat vind jij, moet Froukje Fries of Nederlands tegen die meneer spreken*?
(Froukje is a girl who always speaks Dutch at home. She is walking in the corridor at school. There is a gentleman who carries a handbag. He asks her in Frisian where he can find the director of the school. What do you think, should Froukje speak Frisian or Dutch to that gentleman?)
☐ Fries, dat weet ik zeker
☐ Fries, denk ik
☐ Fries of Nederlands, maakt niet uit
☐ Nederlands, denk ik
☐ Nederlands, dat weet ik zeker

10 *Vind jij de Friese taal onbelangrijk of belangrijk*?
(In your opinion, is the Frisian language unimportant or important?)
☐ heel onbelangrijk
☐ onbelangrijk
☐ gaat wel
☐ belangrijk
☐ heel belangrijk

Appendix IV: Matched-guise test

1 *De 1e, 2e, 3e, 4e verteller is*:
(The 1st, 2nd, 3rd, 4th narrator is)

dom	☐ ☐ ☐ ☐ ☐	slim
ongezellig	☐ ☐ ☐ ☐ ☐	gezellig
slordig	☐ ☐ ☐ ☐ ☐	netjes
onvriendelijk	☐ ☐ ☐ ☐ ☐	vriendelijk
lui	☐ ☐ ☐ ☐ ☐	ijverig
gemeen	☐ ☐ ☐ ☐ ☐	eerlijk

2 *Zou je deze man als je onderwijzer willen hebben*?
(Would you like to have this man as your teacher?)

nee	☐ ☐ ☐ ☐ ☐	ja

3 *De 1e, 2e, 3e, 4e verteller is*:
(The 1st, 2nd, 3rd, 4th narrator is)

onbelangrijk	☐ ☐ ☐ ☐ ☐	belangrijk
saai	☐ ☐ ☐ ☐ ☐	grappig
arm	☐ ☐ ☐ ☐ ☐	rijk
onaardig	☐ ☐ ☐ ☐ ☐	aardig
niet deftig	☐ ☐ ☐ ☐ ☐	deftig

4 *Zou je deze man als je vader willen hebben*?
(Would you like to have this man as your father?)

nee	☐ ☐ ☐ ☐ ☐	ja

5 *Deze man heeft als beroep*:
(This man is a . . . . . by occupation)
☐ vuilnisman ☐ timmerman ☐ kantoorbediende ☐ onderwijzer ☐ dokter

6 *Zou je deze man als je buurman willen hebben*?
(Would you like to have this man as your neighbour?)

nee	☐ ☐ ☐ ☐ ☐	ja

Appendix V: Motivation and Self-confidence Test Battery

A *Integrative orientation*

1 Als je Fries kunt spreken, hoor je er pas echt bij in de klas.
2 Als ik Fries kan spreken, voel ik me meer op m'n gemak bij mensen die Fries spreken.
3 Als je Fries kunt spreken, maak je makkelijker vriendjes of vriendinnetjes.
4 Ik hoef geen Fries te leren, want iedereen verstaat Nederlands.
5 Ik wil net zo goed Fries kunnen spreken als iemand die in Friesland geboren is.
6 Als je Fries kunt verstaan, hoor je er pas echt bij in de klas.
7 Als je Fries kunt verstaan, maak je makkelijker vriendjes of vriendinnetjes.

B *Instrumental orientation*

1 Als je Fries kunt verstaan en spreken, vind je later makkelijker een baan in Friesland.
2 Als je Fries kunt lezen en schrijven, kun je later makkelijker beroemd worden in Friesland.
3 Als je Fries kunt lezen en schrijven, vind je later makkelijker een baan in Friesland.

C *Perceived motivational support (of parents)*

1 Mijn ouders vinden Fries een belangrijke taal.
2 Mijn ouders vinden het belangrijk dat ik Fries kan verstaan.
3 Mijn ouders vinden het leuk als ik Fries spreek.
4 Mijn ouders vinden Fries een mooie taal.
5 Mijn ouders vinden het belangrijk dat ik Fries kan spreken.

D *Perceived motivational support (of the second language group)*

1 Friese kinderen uit mijn klas vinden het belangrijk dat ik Fries kan spreken.
2 Friese mensen vinden het belangrijk dat ik Fries kan spreken.
3 Friese kinderen uit mijn klas vinden het leuk als ik Fries spreek.
4 Friese kinderen uit mijn klas vinden het belangrijk dat ik Fries kan verstaan.
5 Friese mensen vinden het leuk als ik Fries spreek.
6 Friese mensen vinden het belangrijk dat ik Fries kan verstaan.

E *Self-confidence*

1 Ik durf niet Fries te spreken.
2 Ik durf best Fries te spreken.
3 Ik spreek geen Fries, want ik leer het toch nooit goed.
4 Ik ben bang dat de mensen mij uitlachen als ik Fries spreek.
5 Ik spreek graag Fries, want dat klinkt zo leuk.

A Integrative orientation

1 When you are able to speak Frisian, then you really fit in with the rest of the class.
2 When I can speak Frisian, I feel more at ease with people who speak Frisian.
3 If you can speak Frisian it is easier to make friends.
4 I do not have to learn Frisian because everybody understands Dutch.
5 I want to be able to speak Frisian the same way a native speaker does.
6 When you are able to understand Frisian, then you really fit in with the rest of the class.
7 If you can understand Frisian it is easier to make friends.

B Instrumental orientation

1 If you can understand and speak Frisian, it will be easier to find a job in Friesland later on.
2 If you can read and write in Frisian, it will be easier to become famous in Friesland later on.
3 If you can read and write in Frisian, it will be easier to find a job in Friesland later on.

C Perceived motivational support (of parents)

1 My parents think that Frisian is an important language.
2 My parents think it is important for me to be able to understand Frisian.
3 My parents think it is nice when I speak Frisian.
4 My parents think that Frisian is a beautiful language.
5 My parents think it is important for me to be able to speak Frisian.

D Perceived motivational support (of the second language group)

1 Frisian children in my class think it is important that I can speak Frisian.
2 Frisian people think it is important that I can speak Frisian.
3 Frisian children in my class appreciate it when I speak Frisian.
4 Frisian children in my class think it is important that I can understand Frisian.
5 Frisian people appreciate it when I speak Frisian.
6 Frisian people think it is important that I can understand Frisian.

E Self-confidence

1 I dare not speak Frisian.
2 I do dare to speak Frisian.
3 I do not speak any Frisian for I will never learn to do it properly.
4 I am afraid that people will laugh at me when I speak Frisian.
5 I love to speak Frisian, because it sounds so nice.

Appendix VI: Questionnaire parental motivational support

1 *Als er elke dag Friese programma's op televisie komen, gaat u daar dan naar kijken*?
(If there were Frisian programmes on television everyday, would you then be watching them?)
altijd ☐ ☐ ☐ ☐ ☐ nooit

2 *Bent u er tegen of er voor als uw kind meer Friese les op de basisschool zou krijgen*?
(Are you against it or in favour of it if your child would get more Frisian lessons at primary school?)
tegen ☐ ☐ ☐ ☐ ☐ voor

3 *Bent u er voor of er tegen als de onderwijzer(es) bijna altijd Fries zou spreken tijdens bijvoorbeeld de rekenles*?
(Are you in favour or against it if the teacher was to speak nearly always in Frisian for example during arithmetic lessons?)
voor ☐ ☐ ☐ ☐ ☐ tegen

4 *Vindt u de Friese taal onbelangrijk of belangrijk*?
(Is in your opinion the Frisian language unimportant or important?)
onbelangrijk ☐ ☐ ☐ ☐ ☐ belangrijk

5 *Vindt u de Friese taal lelijk of mooi*?
(Is in your opinion the Frisian language ugly or beautiful?)
lelijk ☐ ☐ ☐ ☐ ☐ mooi

6 *Ieder die in Friesland woont, moet naast het Nederlands ook het Fries goed beheersen.*
(Everyone who lives in Friesland must in addition to Dutch have a fair command of Frisian.)
volledig eens ☐ ☐ ☐ ☐ ☐ volledig oneens

7 *Het gebruik van het Fries moet in bepaalde gevallen worden afgeremd.*
(The use of Frisian should be should be restricted in certain cases.)
volledig eens ☐ ☐ ☐ ☐ ☐ volledig oneens

8 *Het Fries moet de officiële taal van Friesland worden.*
(Frisian should become the official language of Friesland.)
volledig eens ☐ ☐ ☐ ☐ ☐ volledig oneens

9 *Wat vindt u van uzelf*?
(How do you see yourself?)
☐ ik voel me Fries
☐ ik voel me Fries, en ook Nederlander
☐ ik voel me Nederlander, en ook Fries
☐ ik voel me Nederlander

10 Welk bord vindt u dat er bij de hoofdstad moet staan?
(Which sign do you think should be posted as you enter the capital?)
☐ Leeuwarden
☐ Leeuwarden/Ljouwert
☐ Ljouwert/Leeuwarden
☐ Ljouwert

11 Praat u wel eens met uw kinderen over opvallende Friese woorden of uitdrukkingen?
(Do you ever talk with your children about unusual Frisian words or expressions?)
☐ vaak
☐ soms
☐ een heel enkele keer
☐ nooit

12 Verbetert u uw kinderen wel eens als ze iets in het Fries zeggen dat fout is?
(Do you ever correct your children if they say something in Frisian that is incorrect?
☐ vaak
☐ soms
☐ een heel enkele keer
☐ nooit

13 Heeft u wel eens een Fries boek voor uw kinderen gekocht?
(Did you ever buy a Frisian book for your children?)
☐ vaak
☐ soms
☐ een heel enkele keer
☐ nooit

14 Vindt u het belangrijk dat uw kinderen Fries kunnen verstaan?
(Do you think it is important if your children are able to understand Frisian?)
☐ heel belangrijk
☐ belangrijk
☐ gaat wel
☐ niet belangrijk
☐ helemaal niet belangrijk

15 Vindt u het leuk als uw kinderen Fries (zouden kunnen) spreken?
(Do you appreciate it if your children are (were) able to speak Frisian?)
☐ heel leuk
☐ leuk
☐ gaat wel
☐ niet leuk
☐ helemaal niet leuk

16 *Vindt u het belangrijk dat uw kinderen Fries spreken*?
(Do you think it is important if your children are able to speak Frisian?)
☐ heel belangrijk
☐ belangrijk
☐ gaat wel
☐ niet belangrijk
☐ helemaal niet belangrijk

17 *Kunt u Fries verstaan/spreken/lezen/schrijven*?
(Are you able to understand/speak/read/write Frisian?)
☐ heel gemakkelijk
☐ goed
☐ vrij aardig
☐ met moeite
☐ helemaal niet

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Let 04 YTSM 1995

Johannes Ytsma

33 kort geschiedenis
van het ontstaan van

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Stellingen

behorende bij het proefschrift

Frisian as first and second language

te verdedigen op 24 april 1995

door J. Ytsma

1. Gezien de moeite die Friestalige kinderen hebben met de verwerving van breking (zie §4.2) is het een gemis dat breking niet systematisch wordt weergegeven in de Friese spelling (vergelijk *tean-teantsje* vs. *stoel-stuoltsje*).

2. De conclusie van De Haan (1990:116) dat er bij het vernederlandsen van de woordvolgorde in de werkwoordelijke eindreeks in het Fries geen sprake is van syntactische ontlening is niet alleen onwaarschijnlijk, maar ook onjuist (zie §6.1).

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3. Uit het onderhavige onderzoek kan de conclusie worden getrokken dat tweetalig onderwijs in Friesland niet slechts op taalbehoud moet zijn gericht, maar ook op taalonderhoud (zie Hoofdstuk 6).

4. Het bevorderen van een positieve attitude ten opzichte van het Fries dient een vast onderdeel te zijn van het schoolwerkplan van elke Friese basisschool.

5. Aan het eind van de basisschool hebben veel in Friesland woonachtige Nederlandstalige kinderen een uitgebreidere actieve woordenschat in het Engels dan in het Fries.

6. Met het oog op de steeds multicultureler wordende samenleving in Nederland is het gewenst dat naast het bestaande Onderwijs in Eigen Taal (OET) voor allochtone kinderen, ook aandacht wordt geschonken aan Onderwijs in Andermans Cultuur (OAC) voor autochtone kinderen.

7. Uitkomsten van empirisch onderzoek kunnen niet zelden beter onder het kopje 'findings' worden geplaatst dan onder 'results'.

8. Het massaal toetreden tot de 'electronische snelweg' zal tegelijk een verdere toename van het internationaal vliegverkeer met zich meebrengen.

9. Een taal is een dialect met televisiesterren.

10. De Friese beweging kan meer leren van de vrouwenbeweging dan omgekeerd.